IN THE UNITED STATES DISTRICT COURT EASTERN DISTRICT OF TEXAS MARSHALL DIVISION

ISLAND INTELLECTUAL PROPERTY LLC,

Plaintiff,

v. Case No. 2:21-cv-273

TD AMERITRADE, INC., TD AMERITRADE CLEARING, INC., TD AMERITRADE TRUST COMPANY, TD AMERITRADE HOLDING CORP., and THE CHARLES SCHWAB CORPORATION,

Defendants.

COMPLAINT

Plaintiff Island Intellectual Property LLC ("<u>Island</u>"), by and through its undersigned attorneys, for its Complaint against defendants TD Ameritrade, Inc. ("<u>TDA</u>"), TD Ameritrade Clearing, Inc. ("<u>TDAC</u>"), TD Ameritrade Trust Company ("<u>TDATC</u>"), TD Ameritrade Holding Corp. ("<u>TDHC</u>"), and The Charles Schwab Corporation ("<u>Schwab</u>") (collectively, "<u>TD Ameritrade</u>" or "<u>Defendants</u>"), hereby alleges as follows:

NATURE OF THIS ACTION

1. The nature of this action is one for patent infringement against TD Ameritrade. TD Ameritrade is offering products and services that practice inventions disclosed in certain of the claims of at least five of Island's patents, U.S. Patent Nos. 7,519,551, 7,933,821, 8,311,916, 7,509,286, and 7,680,734. This is not mere coincidence. Rather, as detailed below, TD Ameritrade obtained the technology to launch such infringing products and services by copying Island's

patented inventions and by obtaining further information concerning the underlying hardware, software, design and staffing requirements, under false pretenses, through a confidential bidding process. It now appears that TD Ameritrade never intended to place a serious bid for the insured cash deposits business of Island's affiliate (which, as noted in a published court decision), later sold for consideration valued at nine figures. Instead, TD Ameritrade obtained the same value for free by feigning interest and then simply purloining the technology. Island accordingly brings this suit against TD Ameritrade for monetary and equitable relief.

PARTIES

- 2. Plaintiff Island is a limited liability corporation organized and existing under the laws of State of Delaware, having its principal place of business in the State of New York.
- 3. Upon information and belief, Defendant TD Ameritrade, Inc. ("<u>TDA</u>") is a business corporation organized and existing under the laws of the State of New York, having its principal place of business in the State of Texas.
- 4. Upon information and belief, Defendant TD Ameritrade Clearing, Inc. ("<u>TDAC</u>") is a business corporation organized and existing under the laws of the State of Nebraska, having its principal place of business in the State of Nebraska.
- 5. Upon information and belief, Defendant TD Ameritrade Trust Company ("TDATC") is a business corporation organized and existing under the laws of the State of Maine, having its principal place of business in the State of Colorado.
- 6. Upon information and belief, Defendant TD Ameritrade Holding Corp. ("<u>TDHC</u>") is a business corporation organized and existing under the laws of State of Delaware, having its principal place of business in the State of Nebraska. Upon further information and belief, TDHC assumed the liabilities for Scottrade Financial Services, Inc. ("<u>Scottrade</u>").

7. Upon information and belief, Defendant The Charles Schwab Corporation ("Schwab") is a business corporation organized and existing under the laws of State of Delaware, having its principal place of business in Westlake, Texas. Upon further information and belief, on or about October 6, 2020, Schwab acquired TD Ameritrade, and the two companies are integrating operations. See https://pressroom.aboutschwab.com/press-releases/press-releases/2020/Schwab-Completes-Acquisition-of-TD-Ameritrade/default.aspx ("TD Ameritrade and Schwab are now part of one company."); https://www.amtd.com/news-and-stories/press-releases/press-releases-details/2020/SCHWAB-COMPLETES-ACQUISITION-OF-TD-AMERITRADE/default.aspx.

JURISDICTION AND VENUE

- 8. This is a civil action for, *inter alia*, patent infringement arising under the United States patent statutes, 35 U.S.C. § 1 *et seq*. This Court has original subject matter jurisdiction over these patent causes of action under 28 U.S.C. §§ 1331 and 1338(a).
- 9. Defendants are subject to this Court's personal jurisdiction because Defendants do substantial business in this State and in this District, including: (i) offering and/or operating financial services within this District; (ii) maintaining headquarters and other offices within this District; and/or (iii) committing patent infringement within this District.
- 10. TD Ameritrade operates several branch offices, including within this District. Upon information and belief, agents in these locations are authorized to and do offer products to customers issued by various TD Ameritrade entities. Upon information and belief, FDIC Insured Deposit Account products issued by TDA, TDAC, TDATC, and TDHC have been and were during the period of infringement offered from TD Ameritrade branch offices in the District, including 6765 Winning Drive, Suite 825, Frisco, Texas 75034 and 6880 South Broadway Avenue, Tyler, Texas 75703. These locations constitute regular and established places of business for at least

TDA, TDAC, TDATC, and TDHC because agents authorized to offer their products worked at these branch offices. In addition, by authorizing agents to offer their products at these branch offices, TDA, TDAC, TDATC, and TDHC ratified these branch offices as their regular and established place of business as part of the TD Ameritrade brand.

- 11. Upon information and belief, throughout the period of infringement, TDA maintained, and continues to maintain, a physical, fixed place of business in this District. For example, TDA has offices within this District, including a TD Ameritrade branch office in Frisco, Texas at 6765 Winning Drive, Suite 825, Frisco, Texas 75034. Upon further information and belief, during the period of infringement, TDA also maintained a branch office in Tyler, Texas at 6880 South Broadway Avenue, Tyler, Texas 75703. In addition, TDA is registered to do business in Texas, with an office address at 3610-2 North Josey, Suite 223, Carrollton, Texas 75007.
- 12. Upon information and belief, throughout the period of infringement, TDAC maintained, and continues to maintain, a physical, fixed place of business in this District. For example, TDAC has offices within this District, including a TD Ameritrade branch office at 6765 Winning Drive, Suite #825, Frisco, Texas 75034 through which infringing FDIC Insured Deposit Account products were offered for sale and/or sold by or on behalf of TDAC, Inc.. Upon further information and belief, during the period of infringement, TDAC also operated out of a branch office at 6880 South Broadway Avenue, Tyler, Texas 75703, through which infringing enhanced FDIC Insured Deposit Account products were offered for sale and/or sold.
- 13. Upon information and belief, throughout the period of infringement, TDATC maintained, and continues to maintain, a physical, fixed place of business in this District and conditions employment on residing in this District. For example, TDATC has offices within this District, including a TD Ameritrade branch office at 6765 Winning Drive, Suite #825, Frisco,

Texas 75034, through which infringing FDIC Insured Deposit Account products were offered for sale and/or sold by or on behalf of TDATC within this District. Upon further information and belief, during the period of infringement, TDATC also operated out of a branch office at 6880 South Broadway Avenue, Tyler, Texas 75703, through which infringing enhanced FDIC Insured Deposit Account products were offered for sale and/or sold.

- 14. Upon information and belief, throughout the period of infringement, TDHC (which assumed the liabilities of Scottrade) maintained, and continues to maintain, a physical, fixed place of business in this District. For example, TDHC has offices within this District, including a TD Ameritrade branch office at 6765 Winning Drive, Suite #825, Frisco, Texas 75034, through which infringing FDIC Insured Deposit Account products were offered for sale and/or sold by or on behalf of TDHC within this District. Upon further information and belief, during the period of infringement, Scottrade also maintained a physical, fixed place of business in this District at 190 East Stacy Road, #4020, Allen, Texas 75002, and at 6880 South Broadway Avenue, Tyler, Texas 75703, at 190 East Stacy Road, #4020, Allen, Texas 75002, and at 1709 Preston Road, Plano, Texas 75093 through which infringing enhanced FDIC Insured Deposit Account products were offered for sale and/or sold.
- 15. Upon information and belief, throughout the period of infringement, Schwab maintained, and continues to maintain, its corporate headquarters at 3000 Schwab Way, Westlake, Texas 76262, and branch offices at 3310 Dallas Parkway, Suite #111, Plano, Texas 75093, and at 2775 South Central Expressway, Suite #140, McKinney, Texas 75070. Upon further information and belief, during the period of infringement, Schwab also operated a branch office at 726 West Southwest Loop 323, Tyler, Texas 75701 through which infringing enhanced FDIC Insured Deposit Account products were offered for sale and/or sold.

- 16. Upon information and belief, as a result of its acquisition of TD Ameritrade, Schwab and TD Ameritrade worked together to offer for sale and/or sell each other's services, including infringing enhanced FDIC Insured Deposit Account products, out of the TD Ameritrade branch office at 6765 Winning Drive, Suite #825, Frisco, Texas 75034 and the Schwab branch offices at 3310 Dallas Parkway, Suite #111, Plano, Texas 75093, and at 2775 South Central Expressway, Suite #140, McKinney, Texas 75070.
- 17. Upon information and belief, venue is proper in this District pursuant to 28 U.S.C. \$\\$1391(b), (c), (d) and 1400(b) because TD Ameritrade, including TDA, TDAC, TDATC, TDHC and Schwab, each has a permanent and continuous presence in, has committed acts of infringement in, and maintains a regular and established place of business in this District. Upon further information and belief, TD Ameritrade has committed acts of direct and indirect infringement in this District, and maintained a regular and established place of business in this District.

PATENTS-IN-SUIT

- 18. U.S. Patent No. 7,519,551 (the "<u>551 Patent</u>"), entitled "Systems and methods for administering return sweep accounts", issued to Bruce Bent and Bruce Bent, II on April 14, 2009, and expired October 21, 2018, a true and correct copy of which is attached hereto as **Exhibit 1**.
- 19. U.S. Patent No. 7,933,821 (the "<u>821 Patent</u>"), entitled "Systems and methods for administering return sweep accounts", issued to Bruce Bent and Bruce Bent, II on April 26, 2011, and expired October 21, 2018, a true and correct copy of which is attached hereto as **Exhibit 2**.
- 20. U.S. Patent No. 8,311,916 (the "<u>916 Patent</u>"), entitled "Systems and methods for administering return sweep accounts", issued to Bruce Bent and Bruce Bent, II on November 13, 2012, and expired October 21, 2018, a true and correct copy of which is attached hereto as **Exhibit**3. (The '551 Patent, '821 Patent, and '916 Patent are collectively referred to as the "<u>Affiliated</u>"

Banking Patents".)

- 21. U.S. Patent No. 7,509,286 (the "<u>'286 Patent</u>" or the "<u>Tiered Interest Rate</u> <u>Patent</u>"), entitled "Systems and methods for money fund banking with flexible interest allocation", issued to Bruce Bent and Bruce Bent, II on March 24, 2009, and remains in effect until July 20, 2022, a true and correct copy of which is attached hereto as **Exhibit 4**.
- 22. U.S. Patent No. 7,680,734 (the "<u>734 Patent</u>" or the "<u>Debit Card Patent</u>"), entitled "*Money fund banking system*", issued to Bruce Bent and Bruce Bent, II on March 16, 2010, and expired March 25, 2021, a true and correct copy of which is attached hereto as **Exhibit 5**.
- 23. Island is the assignee of, and owns all rights, title, and interest in and to, each of the '551, '821, '916, '286, and '734 Patents (collectively, the "Patents-in-Suit") and possesses all rights of recovery thereunder.

BACKGROUND

Island

- 24. Island is a corporate affiliate of Double Rock Corporation ("Double Rock"). Since the 1970s, Double Rock has been one of the leading cash-management and technology solution businesses to the bank, broker-dealer, qualified plan, and retail direct markets. The company was founded by Bruce Bent, who co-created the world's first money-market fund in 1970, is an inductee of the *Financial Planning* and *Money* magazine Halls of Fame, and has been chronicled in the Museum of American Finance, an affiliate of the Smithsonian Institution. Double Rock and its affiliates are industry leaders in providing cash management and money regulation systems, having invented many financial innovations. Island holds approximately 72 patents issued by the U.S. Patent and Trademark Office.
 - 25. Many of Island's patents disclose inventions directed to insured deposit sweep

products, by which cash balances are automatically "swept into" an FDIC-insured interest-bearing account at one or more participating banks. Some of the patents developed by Double Rock disclose inventions that help depositors and investors obtain FDIC insured, interest-bearing accounts with interest rates that can be flexibly assigned, with an unlimited number of fund transfers per month, and with insurance that may exceed FDIC deposit limits. Included among this latter category are the following five Patents-in-Suit.

- 26. At the time of the inventions of the Patents-in-Suit, deposit sweep systems and enhanced insurance deposits posed difficult technical and logistical issues in implementing such systems. Typical deposit sweep systems processed fund transfers among financial institutions according to underlying client account transactions reflected in periodic sweep data exchanged among computer systems of banking institutions and the deposit sweep management system. The voluminous underlying client transactions and directly associated fund transfers between and among the many institutions participating in any number of aggregated deposit programs resulted in burdensome processing loads. Each day potentially thousands of customer accounts, each with one or more daily transactions, would need to be obtained, allocated, distributed, and reconciled in a very short time. These highly intensive computer-based calculations required inventive database organizations, allocation processes, and sophisticated software.
- 27. The inventors are pioneers in the field of deposit sweep programs who, for more than a decade, were leading providers of insured deposit products. Among the technical problems faced and overcome by the inventors of the Patents-in-Suit were (a) how to improve upon interest generation and allocation processes for enhanced insured deposits and deposit sweep systems, which relied upon aggregated accounts across multiple institutions, and (b) how to develop an allocation process that could handle these difficult and time-consuming processes in a timely and

effective manner. The order and combinations of steps reflected in the claims of the Patents-in-Suit were part of the technical solution developed by the inventors.

Affiliated Banking Patents

- 28. A significant technical challenge which the Affiliated Banking Patents addressed was how to develop a simplified sweep system that could provide enhanced FDIC insurance coverage while effectively managing thousands of individual client accounts and distributing client funds to aggregated deposit accounts across multiple banking institutions.
- 29. The Affiliated Banking Patents addressed these challenges by implementing a technological solution that reduced computer processing time employed by banking institutions in operating sweep of enhanced insured deposit programs, increasing efficiency of fund transfers across aggregated deposit accounts in different banking institutions. The claims of the Affiliated Banking Patents detail how to achieve this result by using what was, at the time, an unconventional, nonroutine computerized method comprising steps of maintaining, aggregating, allocating, and withdrawing funds of client accounts, and maintaining, administering, and withdrawing funds from, aggregated deposit accounts at multiple banking institutions.
- 30. For example, claim 1 of the '551 Patent discloses a computer-implemented method for managing funds for a plurality of client accounts for a plurality of clients whose funds were accepted for deposit in respective client accounts held in the names of the respective clients at a first banking institution, the method comprising:
 - (a) maintaining a plurality of FDIC-insured and interest-bearing aggregated deposit accounts, each aggregated deposit account held in a different respective bank of a different respective banking institution including an FDIC-insured and interest-bearing aggregated deposit account held at the first banking institution;
 - (b) maintaining or having maintained an electronic database, on one or more computer-readable media, containing information on funds held by each client in the plurality of aggregated deposit accounts;

- (c) administering the aggregated deposit accounts to transfer or have transferred client funds that had been accepted into respective client accounts held in the names of the respective clients at the first banking institution to the aggregated deposit account at the first banking institution except that for clients with a balance of funds in the aggregated deposit account at the first banking institution that equal or exceed a specified amount depositing or having deposited additional funds of that client to one of the aggregated deposit accounts in a different one of the banking institutions;
- (d) withdrawing or having withdrawn client funds from the FDIC-insured and interest-bearing aggregated deposit account held at one of the banks of one of the banking institutions more than six times during a month while preserving an insured and interest-bearing status of the FDIC-insured and interest-bearing aggregated deposit account held at the one bank; and
- (e) updating or having updated the electronic database based on the transfers to and withdrawals in the plurality of aggregated deposit accounts.
- 31. In addition to the unique and unconventional combination of steps as presented, claim 1 includes novel elements, including the "maintaining" steps, and the withdrawing client funds more than six times during a month while preserving an insured and interest-bearing aggregated deposit account. Individually and collectively, these steps were inventive, not well-understood, unconventional, and non-routine at the time of the invention.
- 32. Claim 19 of the '821 Patent, in turn, provides for a different application of the inventive and technical solution, in a different inventive ordered combination of steps, by disclosing a computer-implemented method, comprising:
 - (a) maintaining or having maintained or accessing an electronic database, on one or more computer readable media, containing client account information for a plurality of client accounts for a plurality of clients whose funds had been accepted for deposit in the names of the respective clients at a first banking institution that includes a first bank in its infrastructure;
 - (b) maintaining or having maintained or accessing the same or a different electronic database, on one or more computer-readable media, containing aggregated deposit account information for a plurality of Federal Deposit Insurance Corporation (FDIC)-insured and interest-bearing aggregated deposit accounts, held in a plurality of banks of a plurality of banking institutions and including at least one FDIC-insured and interest-bearing aggregated deposit account held at the first bank in the first banking

- institution, wherein each aggregated deposit account hold funds of a plurality of client accounts, wherein a client account represents funds of a client held in one or more of the aggregated deposit accounts held by the banks,
- (c) allocating, by one or more computers, for more than one of the client accounts, the client funds from these respective client accounts, among more than one of aggregated deposit accounts, so that at least a portion of these client funds are maintained in the aggregated deposit account in the first bank and at least a portion of the client funds are maintained in an aggregated deposit account held in at least one of the banks in one of the different banking institutions;
- (d) determining, by the one or more computers, client funds to be withdrawn from the FDIC-insured and interest-bearing aggregated deposit account held at one of the banks of one of the banking institutions more than six times during a month while preserving an insured and interest-bearing status of the FDIC-insured and interest-bearing aggregated deposit account held at the one bank; and
- (e) updating or having updated, by the one or more computers, the electronic database based on the allocation of client funds to or from the plurality of aggregated deposit accounts.
- 33. This efficient and effective management of funds across accounts at different banking institutions was enabled by maintaining electronic databases comprising information of individual client accounts and aggregated deposit accounts. Such inventive database structures helped to make the distribution of client funds across aggregated deposit accounts at multiple banking institutions faster and more efficient, and improved the functioning of the overall technological process of computerized deposit sweep systems. Prior to the invention, by contrast, available systems and methods were unable to efficiently manage databases to allocate the large amount of funds among multiple banks, all while correctly calculating capacity, coverage, and interest for client accounts held in aggregated accounts.
- 34. Further, claim 21 of the '821 Patent discloses the computer-implemented method of claim 19, further comprising:

causing distribution of interest, by the one or more computers, from said FDIC-insured interest-bearing aggregated deposit accounts to said client

accounts; and

updating or having updated, by the one or more computers, one or more of the electronic databases with information about the interest distributed to said client accounts.

- 35. The additional step of distributing interest from aggregated accounts to individual client accounts, and updating the databases, accordingly, as provided in claim 21, was unconventional. The unconventional database structure that enabled the correct distribution of interest among client accounts, and the update of client account information accordingly, allowed for deposit sweep programs to be accomplished faster and more efficiently.
- 36. Further, claim 24 of the '821 Patent discloses the computer-implemented method of claim 19, further comprising performing, by the one or more computers, one or more of the following steps:

accessing electronic check deposit data; accessing electronic Fed wire deposit data; accessing electronic ACH deposit data; accessing electronic debit card transaction files; accessing electronic credit card transaction files; accessing electronic check presentment data; accessing electronic ACH debit data; accessing electronic touch tone bill paying data; accessing electronic Internet bill paying data.

- 37. The additional step of accessing the listed data in claim 24 allowed access to different electronic systems associated with different types of cash vehicles as part of the same program. This unconventional feature enabled the process of deposit sweep systems to be accomplished faster and more efficiently, and improved the functioning of the overall technological process.
 - 38. Further, claim 25 of the '821 Patent discloses the computer-implemented method

of claim 19, further comprising:

computer-readable instructions that, when executed, allow the one or more computers to receive client data for deposits and/or transfers to and withdrawals and/or transfers from each of their respective client accounts from an Internet telecommunications network.

- 39. The additional step of receiving client data for deposits and/or withdrawals, as provided by claim 25, was unconventional. Such additional step, in combination with the method of claim 19, was more efficient and facilitated improved customer control over funds.
- 40. Claim 1 of the '916 Patent, in turn, provides for a different application of the inventive and technical solution, in a different inventive ordered combination of steps, by disclosing a method comprising:
 - (A) accessing, using one or more computers, one or more electronic databases, stored on one or more computers-readable media, the one or more databases comprising:
 - (1) aggregated account information for a plurality of government backed-insured and interest-bearing aggregated deposit accounts held in a plurality of financial institutions participating in a program including a first depository institution in infrastructure of a first financial institution of the plurality of the financial institutions and a second depository institution in infrastructure of a different financial institution of the plurality of the financial institutions, wherein funds from client accounts of a plurality of clients are aggregated with funds of other client accounts in the aggregated deposit accounts held in the financial institutions, with the aggregated deposit accounts providing non-penalized liquidity for the funds held therein;
 - (2) client account information for funds, for each of a plurality of respective client accounts, held in one or more of the plurality of the financial institutions, with funds accepted for deposit for respective ones of the clients accounts in the names of the respective clients at the first financial institution, with the client account information comprising a respective balance of funds, from the respective client account, held in each of one or more of the aggregated deposit accounts holding funds of the respective client account; and
 - (B) allocating, using the one or more computers, for multiple of the client accounts, the client funds of these respective client accounts among more than one of aggregated deposit accounts, so that at least a portion of these client funds are maintained in the aggregated deposit account in the first

- depository institution and at least a portion of the client funds are maintained in the aggregated deposit account held in the second depository institution in the different financial institution:
- (C) determining, using the one or more computers, client funds to be withdrawn from the aggregated deposit account held at one of the depository institutions of one of the financial institutions more than six times during a month while preserving an insured and interest-bearing status of the aggregated deposit account held at the one depository institution;
- (D) generating one or more instructions to transfer funds to or from one or more of the respective aggregated deposit accounts in the respective depository institutions in the program through an aggregated demand deposit account based at least in part on the respective allocations determined for the respective depository institutions in the program, wherein the one or more instructions comprise making a withdrawal and/or transfer from the one aggregated deposit account more than six times during the month period to correspond at least with the more than six of the allocations determined over the month period that are withdrawals, while maintaining an insured and interest-bearing status of the aggregated deposit account held at the one depository institution; and
- (E) updating or having updated, using the one or more computers, the one or more electronic databases based at least in part on the allocation of client funds to or from the plurality of aggregated deposit accounts.
- 41. In addition to the unique and unconventional combination of steps as presented, claim 1 includes novel elements, as reflected in the database structures, as well as the "allocating" step. Individually and collectively, these steps were inventive, not well-understood, unconventional, and non-routine at the time of the invention.
- 42. The use of aggregated deposit accounts across different banking institutions was enabled by the unconventional and nonroutine "allocating" step, which allowed customer funds to be distributed to enough banks to provide enhanced FDIC insurance coverage. The use of aggregated deposit accounts was also enabled by the inventive and unconventional database structure, which comprised both aggregated account information and client account information. Such inventive database structures made the distribution of client funds across aggregated deposit accounts at multiple banking institutions faster and more efficient, and improved the functioning of the overall technological process of computerized deposit sweep systems. Prior to the invention,

by contrast, available systems and methods were unable to manage databases as claimed to allocate the large amount of funds among multiple banks, all while correctly calculating capacity, coverage, and interest for client accounts held in aggregated accounts.

Tiered Interest Rate Patent

- 43. Another technical challenge was how to provide flexible interest rates in the context of insured deposits, with an allocation process that allowed for each of the broker dealer's customer's funds to be distributed to enough banks to enable enhanced FDIC insurance coverage, while enabling each customer to earn interest commensurate with the customer's importance to the broker dealer. While tiered interest rates had been implemented on individual accounts prior to the Patents-in-Suit, the inventors were the first to resolve the technical challenge of doing so with aggregated accounts involving multiple unrelated banking institutions.
- 44. The Tiered Interest Rate Patent implements the technical solution developed by the inventors of calculating interest rates, for funds of each client account held within an aggregated account, with funds of other client accounts "independent from the respective client account pro rata share in earnings posted" in the respective aggregated account.
- 45. With this epiphany, the inventors invented the key and unorthodox inventive element that fostered what has become ubiquitous as a result of their commercialization and implementation of these processes.
- 46. For example, claim 1 of the '286 Patent (the Tiered Interest Rate Patent) discloses a method for managing funds of a plurality of respective client accounts associated with a plurality of respective clients participating in a program, comprising:

maintaining a plurality of FDIC-insured and interest-bearing aggregated deposit accounts, each of the aggregated deposit accounts being interest-bearing, with one or more of the aggregated deposit accounts held in each different one of a plurality of financial institutions in the program;

maintaining funds of a plurality of the clients in the plurality of aggregated deposit accounts so that each aggregated deposit account holds funds of a plurality of the clients, with each client account in a subset of the plurality of client accounts having funds in their respective client account over a predetermined amount, with each of the respective client accounts in the subset having funds deposited in a plurality of the aggregated deposit accounts;

maintaining or having maintained or accessing by computer an electronic database, on one or more computer readable media, comprising a respective balance of funds for each of a plurality of the respective client accounts in the subset and information on funds held by each of the plurality of clients of the subset in the plurality of aggregated deposit accounts;

receiving electronic client transaction data describing debit and/or credit transactions made by a plurality of clients against their respective client accounts;

updating the respective balance of funds in the database associated with each of the respective client accounts in the subset based on one or more debit and/or credit transactions made by the respective client;

determining electronically for each of the plurality of the client accounts in the subset of client accounts a respective interest rate from among a plurality of interest rates in an interest-allocation procedure based at least in part on the updated balance of funds associated with the respective client account in the subset;

calculating electronically a respective interest for a period to be posted to each of a plurality of respective client accounts in the subset, with the respective interest to be posted to a respective client account determined based on the respective interest rate determined for that respective client account in the subset, with the calculating being independent from the respective client account pro rata share in earnings posted to the plurality of the aggregated deposit accounts holding funds of the respective client account;

determining interest earned during the period by each of the plurality of aggregated deposit accounts in the program; and

posting electronically the respective interest calculated for each of the plurality of respective client accounts based on the respective interest rate determined for the respective client account.

47. In addition to the novel combination of steps as presented, this claim includes elements directed to novel account structures as reflected in the "maintaining" steps, as well as unconventional and inventive interest determination and calculation. Individually and

collectively, these steps were inventive, not well-understood, unconventional, and nonroutine at the time of the invention.

- 48. For example, at the time of the invention, the use of aggregated accounts in the context of a deposit sweep product was new, and first developed by the inventors in the context of the original priority patent, U.S. Patent No. 6,374,231 (the "231 Patent") (reissued on March 13, 2021 as US RE43,246 E), to which the Debit Card Patent claims priority as a continuation.
- 49. With the use of aggregated accounts, technical challenges began to evolve. One such technical challenge was how to pay interest to the customer. The conventional interest calculation was to apply the same interest rate on all funds held in the same account. If another interest rate were to be applied, the conventional method was to open a new account. Prior art sweep products would avoid this issue by having separate and individual accounts for each customer. This proved particularly cumbersome for computer systems of the time.
- 50. By applying a novel and unconventional interest calculation "independent from the respective client account pro rata share in earnings posted to the plurality of aggregated deposit accounts holding funds of the respective client account", the inventors solved this technological challenge with this technological solution.

Debit Card Patent

- 51. A significant technical challenge that the Debit Card Patent sought to address was how to facilitate improved client control over client funds among aggregated deposit accounts, while minimizing electronic transfer activity.
- 52. The Debit Card Patent addressed this challenge through a technological solution that reduced computer processing time employed by banking institutions in sweeps of enhanced insured deposit programs, increasing efficiency of client fund transfers to and from aggregated

deposit accounts. The claims of the Debit Card Patent detail how to achieve this result by using what was, at the time, an unconventional, nonroutine computerized method comprising steps of accessing a database with client account information, administering transactions in client accounts, determining net transactions and whether to deposit or withdraw client funds from aggregated deposit accounts, and making more than six withdrawals in a month from an aggregated deposit account while maintaining its interest-bearing and FDIC insured status.

53. For example, claim 1 of the '734 Patent discloses a method for managing a plurality of client accounts for a plurality of clients, comprising:

accessing, by one or more computers, a database comprising information for each client account that has client account funds aggregated with funds of a plurality of other of the client accounts and are held in one or more FDIC-insured and interest-bearing aggregated deposit accounts held in one or more FDIC insured banking institutions, with the information for each of the client accounts including information on each client's funds held in said one or more insured and interest-bearing aggregated deposit accounts; and

administering, by the one or more computers, deposits to and withdrawals from each of a plurality of said client accounts, including more than six withdrawals in a month from each of a plurality of the client accounts, with one or more of said withdrawals made by debit card;

determining, by the one or more computers, on a regular basis one or more net transactions as sums of said deposits to and withdrawals from said client accounts;

determining, by the one or more computers, from said net transactions whether to deposit funds to or withdraw funds from said one or more FDIC-insured and interest-bearing aggregated deposit accounts;

making or having made more than six withdrawals in a month of funds from one of the FDIC-insured and interest-bearing aggregated deposit accounts via at least one intermediate bank that is different from the one or more FDIC insured banking institutions; and

updating, by the one or more computers, the database with deposits to and withdrawals from said each client account.

54. Similarly, claim 8 of the '734 Patent discloses the above method for managing a plurality of client accounts for a plurality of clients, further comprising:

accessing, by one or more computers, a database comprising information for each client account that has client account funds aggregated with funds of a plurality of other of the client accounts and are held in one or more FDIC-insured and interest-bearing aggregated deposit accounts held in one or more FDIC-insured banking institutions, with the information for each of the client accounts including information on each client's funds held in said one or more insured and interest-bearing aggregated deposit accounts; and

administering, by the one or more computers, deposits to and withdrawals from each of a plurality of said client accounts, including more than six withdrawals in a month by check or debit card or ACH from each of a plurality of the client accounts, with one or more of said withdrawals made by debit card;

determining, by the one or more computers, on a regular basis one or more net transactions as sums of said deposits to and withdrawals from said client accounts;

determining, by the one or more computers, from said net transactions whether to deposit funds to or withdraw funds from said one or more FDIC-insured and interest-bearing aggregated deposit accounts;

making or having made more than six withdrawals in a month of funds from one of the FDIC-insured and interest-bearing aggregated deposit accounts via at least one intermediate bank that is different from the one or more FDIC insured banking institutions; and

updating, by the one or more computers, the database with deposits to and withdrawals from said each client account.

- 55. The claims include elements directed to an unconventional and inventive method for netting transactions of client accounts. Based off of the net transaction, the method provides for determining whether to deposit funds to or withdraw funds from an aggregated deposit account. These innovative and unconventional steps minimized electronic transfer activity and provided for added efficiency. Without such netting, sweep deposit account systems had to make hundreds of thousands of individual transactions between individual client accounts and aggregated deposit accounts. This added efficiency improved the functional of the overall technological process of computerized deposit sweep systems.
 - 56. Further, claim 5 of the '734 Patent discloses the method of claim 1, further

comprising:

holding client account funds for at least one of the client accounts in a plurality of the FDIC-insured and interest-bearing aggregated deposit accounts, each of the plurality of aggregated deposit accounts held in a different FDIC insured banking institution.

57. Similarly, claim 12 of the '734 Patent discloses the method of claim 8, further comprising:

holding client account funds for at least one of the client accounts in a plurality of the FDIC-insured and interest-bearing aggregated deposit accounts, each of the plurality of aggregated deposit accounts held in a different FDIC-insured banking institution.

58. Further, claim 16 of the '734 Patent discloses the method of claim 1, further comprising:

holding some client account funds for at least one of the client accounts in at least one interest-bearing aggregated deposit account that is not FDICinsured, and further comprising

maintaining in the database information on the client's funds held in said at least one interest-bearing aggregated deposit account that is not FDIC-insured; and

determining from said net transactions whether to deposit funds to or withdraw funds from the at least one interest-bearing aggregated deposit account that is not FDIC-insured.

59. Similarly, claim 15 of the '734 Patent discloses the method of claim 8, further comprising:

holding some client account funds for at least one of the client accounts in at least one interest-bearing aggregated deposit account that is not FDICinsured, and further comprising

maintaining in the database information on the client's funds held in said at least one interest-bearing aggregated deposit account that is not FDIC-insured; and

determining from said net transactions whether to deposit funds to or withdraw funds from the at least one interest-bearing aggregated deposit account that is not FDIC-insured.

60. The unconventional and innovative step of holding some client accounts funds in an interest-bearing, but not FDIC-insured, aggregated deposit account (*e.g.*, a money market fund),

maintaining information of client funds in such account, and determining from net transactions whether to deposit funds to or withdraw funds from such account, as provided by claims 15 and 16, was unconventional. At the time of the invention, typical deposit sweep systems were met with burdensome processing loads in transferring funds between client accounts and aggregated deposit programs. Through the implementation of this unconventional step, in combination with the method of claims 1, 8, 5, and 12, deposit sweep systems were more effectively and efficiently able to transfer and keep track of client funds in multiple accounts though the detailed process as described and claimed.

Industry Recognition and Prior Litigation

- 61. The Patents-in-Suit are recognized and licensed by leading members of the banking and financial services industry. Major players, including Promontory, Deutsche Bank, Total Bank Solutions, Reich & Tang, Pershing, Clearview, First Southwest, Intermedium Financial and StoneCastle, have voluntarily taken a license to access the technology disclosed in the Patents-in-Suit. For example, royalty payments due to Island by Reich & Tang "include payment, on a quarterly basis, of 15% of [its] gross revenue on certain of its lines of business (or a greater amount dependent on another formula)." *Island Intellectual Prop. LLC v. Reich & Tang Deposit Solutions, LLC*, 57 Misc.3d 195, 203 (Sup. Ct., N.Y. Cnty. June 14, 2017).
 - 62. The Patents-in-Suit have been successfully enforced in litigation.
- 63. All of the Patents-in-Issue were adjudicated to be valid, enforceable, and patenteligible by consent judgment in *Reich & Tang Deposit Solutions, LLC et al v. Island Intellectual Property LLC et al*, No. 16-cv-01087-GMS (D. Del. Dec. 7, 2017).
- 64. In addition, in *Island Intellectual Property LLC*, et al. v. Deutsche Bank AG, et al., 2012 WL 386282, *7 (S.D.N.Y. Feb. 6, 2012), the U.S. District Court rejected a patent eligibility

challenge to the '551 Patent and the '286 Patent, finding that: "Reading the claims, it is not difficult to conclude that their methods would be impracticable but for significant and complex computer programming permitting the transfer, tracking, calculation and actual payment of funds and interest between various financial institutions and numerous client and aggregated accounts. . . . [T]he claims on their face require controlled interaction between the intermediate banks, the source banks who deal with the customers, and the program banks which hold the aggregated accounts." (Internal quotation marks omitted.)

65. Lastly, as all six Patents-in-Suit were determined by the U.S. Patent Office to be valid, enforceable, and patent-eligible, the Patents-in-Suit are granted a presumption of validly pursuant to 35 U.S.C. § 282.

INFRINGEMENT OF THE PATENTS-IN-SUIT

TD Ameritrade's Longstanding Business Relationship With Island's Corporate Affiliates

- 66. TD Ameritrade, including TDA, TDAC, TDATC, and Scottrade, have long known about the patents, the patented technology as implemented by Double Rock (Island's parent and predecessor, owner of the Patents-in-Suit) and the benefits that its patented technology provided Double Rock and Double Rock's customers.
- 67. In 1990, TD Ameritrade's predecessor, Ameritrade, Inc. ("Ameritrade"), entered into a business relationship with another Double Rock affiliate, Resrv Partners, Inc. ("Resrv"), for the sale and distribution of shares of money market funds to Ameritrade's customers. For more than a decade, the business relationship deepened. In 2004-2005, Double Rock added several hundred thousand Ameritrade brokerage accounts to Double Rock's insured cash deposits platform. Thereafter, Ameritrade's brokerage business was transferred to an affiliate film, TD Waterhouse Investor Services, Inc. ("TD Waterhouse"), which was renamed "TD Ameritrade,

Inc." The insured deposits relationship continued thereafter for several years.

- 68. The acquiring company, TD Waterhouse, was already aware and knowledgeable of Island's then-patent portfolio. In 2004, after the disclosures resulting in the Patents-in-Suit were filed, Island had initiated business discussions with TD Waterhouse in regard to the technology and innovation disclosed in the then-recently published U.S. Publication No. 2002-0091637 A1 (which matured into the '551 Patent) and priority patent, the '231 Patent. After years of communications, however, the successor TD Ameritrade entity ultimately did not obtain a license to the '551 Patent or any of Island's related technologies.
- 69. Similarly, in 2006, Double Rock entered into a Nondisclosure Agreement with Scottrade in preparation for discussions regarding its FDIC-insured sweep solutions and tiered insured deposits strategy. Like Ameritrade, since at least 2000, Scottrade had been a business partner with Island affiliate Resrv for the sale of money fund shares. During the parties' detailed discussions in 2006 about expanding their relationship, Double Rock shared the benefits of its proprietary patented technology including in the '231 Patent and the then-pending application that matured into the '286 Patent, by which Scottrade could have the ability to control the interest rate paid to clients based on a variety of parameters set by Scottrade:

- Increased FDIC Insurance up to \$1,000,000
- Any number of deposit banks can be added to the process.
- Deposit banks can be attached to all accounts; a specific group of accounts, and one account or to a specific branch only.
- Deposit banks can be blocked for one account, a group of accounts or a branch.
- Ease of movement of deposits amongst various banks
- Ability to provide insurance as client can move deposits to banks which don't have an existing relationship
- Tier Processing
- The tier process allows Scottrade to control the rate that is paid to their clients based on a variety of parameters.

- · The ability to set and control rates within tiers
- Tiers that can be established based on the clients' balance in Insured Deposits.
- Tiers that can be established based on account relationships, allowing both the parent account and the children accounts to obtain the same rate if desired.
- Tiers that can be setup based on the overall value of the account, not just the cash balance.
- Tiers that can be setup based on products used.
- The ability to establish variable tiers that can be set up for promotions; customers would be paid a promotional rate for a specified period of time and later default to the standard rate.
- A tier process that allows Scottrade to control the income distributed to customers and better control the revenue stream.

Despite learning of the benefits of Island's patented technology, Scottrade did not pursue a business relationship with Double Rock or obtain a license from Island.

- 70. In 2007, Double Rock corresponded with Roger Riney, the Founder, President, and Chief Executive Officer of Scottrade, after learning of Scottrade's decision to go with another provider for an FDIC-insure money market product. Double Rock explicitly stated that Scottrade would "require a license if the product were too similar to [Double Rock's] since there [was] significant intellectual property involved." Scottrade did not thereafter acquire a license. In 2017, Scottrade was acquired by, and merged into, TD Ameritrade.
- 71. The technology disclosed by the '286 Patent (the Tiered Interest Rate Patent) and at least the '551 Patent (an Affiliated Banking Patent) was commercially embodied in the "Liquid Insured Deposits" program of Liquid Insured Deposits Capital, LLC, a Double Rock corporate affiliate. The program provided a convenient and flexible FDIC-insured sweep enabling clients to insure up to \$2.5 million of cash holding, served as a vehicle to increase assets under management, and allowed for access to cash at any time without withdrawal penalties. The description of the

program was accompanied by text indicating it was covered by the '286 and '551 Patents. https://web.archive.org/web/20101208183934/http://doublerockcorp.com/lids.shtml.

- 72. In 2008, Double Rock entered into a process to sell its insured cash deposits business, Liquid Insured Deposits. One of the interested parties was TD Ameritrade. Following TD Ameritrade's execution of a Confidentiality Agreement, Double Rock provided it with an Executive Summary explaining its patented technology in detail. Thereafter, TD Ameritrade advised Double Rock that it was "critical" that Double Rock answer a further series of highly specific technology questions regarding hardware, software, design and staffing. Double Rock answered all of the questions, explaining in detail how to perform the technological elements of the claims. Thereafter, TD Ameritrade never placed a bid. Instead, just a few months later, it entered into an Insured Deposit Account Agreement, dated as of December 19, 2009, with a then-corporate affiliate to establish a business substantially similar to the "Liquid Insured Deposits" program of Liquid Insured Deposits Capital, LLC, employing substantially similar technology, albeit without any license from Island.
- 73. Ultimately, Double Rock sold its insured cash deposits business to Reich & Tang Asset Management, LLC for an upfront cash payment of \$15 million, plus an ongoing revenue stream estimated to "yield approximately \$92 million in royalty payments over the course of the license." *Island Intellectual Prop. LLC*, 57 Misc.3d at 199. TD Ameritrade, by contrast, has paid nothing to date for the technology it learned through the bid process.

TD Ameritrade's Insured Deposit Account Product From June 2015 through October 2018

74. As noted above, starting in at least 2004, TD Ameritrade, and its predecessors, knew about the disclosure, patents, and commercial implementation of the patented technology by Double Rock and its licensees before entering into the Insured Deposit Account Agreements in

2009 and 2013, the latter amended in 2016 and 2019. Thus, when TD Ameritrade designed and implemented the infringing enhanced FDIC Insured Deposit Account program, upon information and belief, it copied Double Rock and Island's intellectual property.

- 75. From at least June 2015 through at least October 21, 2018, TD Ameritrade "offer[ed] a cash sweep program to enable [clients] to earn interest on cash balances in [the client's] TD Ameritrade account." *See* June 2016 Summary of Cash Balance Programs at https://web.archive.org/web/20160923162548/https://www.tdameritrade.com/retailen us/resources/pdf/TDA7002.pdf ("2016 Cash Balance Programs Summary").
- 76. During this period, TD Ameritrade collected over \$3 billion in bank deposit account fee revenue generated by its deposit sweep products, that had average bank deposit account balances ranging from \$83 billion dollar in 2016 to \$116 billion in 2018, by practicing the methods claimed in the Affiliated Banking Patents. *See* 2018 Form 10-K for the Fiscal Year Ended September 30, 2018

https://www.sec.gov/Archives/edgar/data/1173431/000117343118000125/amtd_20180930x10k. htm ("2018 Form 10-K"), p. 35.

77. TD Ameritrade's FDIC Insured Deposit Account ("FDIC Insured Deposit Account")¹ "serve[d] as the primary cash sweep vehicle for earning income on cash balances in TD Ameritrade brokerage accounts and is the default cash sweep vehicle..." See 2016 Cash

¹ FDIC Insured Deposit Account Rates: Effective October 5, 2018 -

 $[\]underline{https://web.archive.org/web/20181010140345/https://www.tdameritrade.com/pricing/margin-and-interest-rates.page;} \ Effective January 11, 2019 -$

 $[\]underline{https://web.archive.org/web/20190322024015/https://www.tdameritrade.com/pricing/margin-and-interest-rates.page;} \ Effective October 10, 2019 -$

https://web.archive.org/web/20191011184328/https://www.tdameritrade.com/pricing/margin-and-interest-rates.page; Effective November 11, 2019

https://web.archive.org/web/20200303142412/https://www.tdameritrade.com/pricing/margin-and-interest-rates.page; and Effective March, 17, 2020 -

https://web.archive.org/web/20190729204735/https://www.tdameritrade.com/pricing/margin-and-interest-rates.page.

Balance Programs Summary.

- 78. Thus, TD Ameritrade practiced, as part of its FDIC Insured Deposit Account program during this period, a computer-implemented method for managing funds of its clients with their brokerage accounts that were accepted for deposit in their respective client accounts at TD Ameritrade. For example, TD Ameritrade "receive[d] and process[ed] trade orders through a variety of electronic channels, including the Internet [and] mobile trading applications...[which] are heavily dependent on the integrity of the electronic systems supporting them." 2018 Form 10-K, p. 13. Such orders were made through TD Ameritrade's "Online Cash Services", or through the trading applications it developed for mobile devices, including the Android, iPhone, and iPad. TD See Ameritrade 2017 Cash Management Services Webpage at https://web.archive.org/web/20170311044147/https://www.tdameritrade.com/investmentproducts/cash-management.page ("2017 Cash Management Services"); see also TD Ameritrade About Us Webpage at https://www.tdameritrade.com/about-us.html ("About Us").
- 79. In the context of managing the FDIC Insured Deposit Accounts, TD Ameritrade, including TDAC, TDATC, and Scottrade, acted as the authorized agent, nominee, custodian and messenger for each of their respective clients and established and maintained, made deposits to and withdrawals from, and effected other transactions from the respective aggregated deposit accounts (referred to as "Master Accounts") established by TD Ameritrade at its program banks, including TD Bank and TD Bank USA. *See* Insured Deposit Account Agreement (January 1, 2013) at https://sec.report/Document/0001193125-13-041076/d460456dex101.htm ("2013 IDA"), pp. 5-6, 13; Amendment No. 1 to the Insured Deposit Account Agreement dated October 24, 2016 ("2016 Amendment"), p. 2 ("Ameritrade Parent [TDHC] will cause Scottrade to perform the functions contemplated by Section 1 of the [2013] IDA Agreement with respect to the Scottrade

Master Accounts on the same terms and subject to the same conditions as set forth therein.").

- 80. As Section 1 of the 2013 IDA makes clear, TDAC and TDATC directly performed infringing acts that are the basis of this Complaint. 2013 IDA, pp. 5-6 ("[TDAC/TDATC will act as the authorized agent, nominee, custodian and messenger of each [TDAC/TDATC] Customer...in establishing, maintain, making deposits to and withdrawals from, and effecting other transactions in the [TDAC/TDATC] Master Accounts established and maintained by [TDAC/TDATC] in [their] name."; "[TDAC/TDATC] hereby agree[] to act as recordkeeper in maintaining the information set forth in Section 10 with respect to the [TDAC/TDATC] Customer Accounts.").
- 81. The 2013 IDA further makes clear that TDA directly performed, and/or induced TDAC and TDATC to perform, infringing acts that are the basis of this Complaint. 2013 IDA, pp. 4-5 ("WHEREAS, TDA desires to make the Money Market Deposit Account available, either as designated Money Market Deposit Account sweep vehicle or as a non-sweep deposit account to its customers"; "WHEREAS, the parties intend that the Customer Accounts will be eligible for federal deposit insurance by the FDIC for the maximum aggregate amount of principal and interest available with respect to each Customer's aggregate deposits maintained in a single recognized legal capacity").
- 82. As the 2016 Amendment to the 2013 IDA makes clear, Scottrade (the liabilities of which were assumed by TDHC) also directly performed infringing acts that are the basis of this Complaint. 2016 Amendment, p. 2 ("Ameritrade Parent [TDHC] will cause Scottrade to perform the functions contemplated by Section 1 of the [2013] IDA Agreement with respect to the Scottrade Master Accounts on the same terms and subject to the same conditions as set forth therein.").
 - 83. Further, the 2016 Amendment also makes clear that TDHC caused Scottrade to

participate in and perform infringing acts that are the basis of this Complaint. 2016 Amendment, p. 2 ("Ameritrade Parent [TDHC] will cause Scottrade to perform the functions contemplated by Section 1 of the [2013] IDA Agreement with respect to the Scottrade Master Accounts on the same terms and subject to the same conditions as set forth therein.").

- 84. As part of its FDIC Insured Deposit Account program, TD Ameritrade maintained a plurality of FDIC-insured and interest-bearing aggregated deposit accounts, held in TD Ameritrade's TD Bank and TD Bank USA, as well as "non-affiliated third-party depository financial institutions." *See* 2018 Form 10-K, p. 48.
- 85. Since as early as 2016, "[t]he Interest Deposit Account serve[d] as the primary cash sweep vehicle for earning [interest] on cash balances." *See* 2016 Cash Balance Programs Summary, p. 1.
- 86. Client accounts were also "eligible for federal deposit insurance by the FDIC for the maximum aggregate amount of principal and interest available with respect to each Customer's aggregate deposits maintained in a single recognized legal capacity." *See* 2013 IDA, p. 5; *see also* 2016 Cash Balance Programs Summary, p. 1 ("In the unlikely event that TD Bank or TD Bank USA should fail, each depositor with Insured Deposit Account balances is insured, up to the \$250,000 limit.").
- 87. TD Ameritrade offered enhanced FDIC Insured Deposit Accounts through affiliated and third-party banking relationships. *See* 2018 Form 10-K, p. 6. Specifically, TD Ameritrade "enter[ed] into off-balance sheet arrangements with TD and unaffiliated third-party depository financial institutions (together, the 'Sweep Program Counterparties') to manage its sweep program. The sweep program [was] offered to eligible clients whereby the client's uninvested cash [was] swept into FDIC-insured (up to specific limits) money market deposit

accounts at the Sweep Program Counterparties." Id., p. 87.

- 88. As part of its FDIC Insured Deposit Account program, TD Ameritrade, including TDAC, TDATC and Scottrade, acted as a recordkeeper in maintaining necessary account information, including information on funds held in client brokerage accounts and aggregated deposit accounts, in an electronic database. See 2013 IDA, pp. 5-6, 16 ("[TDAC/TDATC] hereby agrees to act as recordkeeper in maintaining the information set forth in Section 10 with respect to the [TDAC/TDATC] Customer Accounts"; "As agents and custodians for the Customers, each of TDAC and TDATC will maintain, in good faith and in the regular course of business, and in accordance with applicable published requirements of the FDIC ... books and records setting forth the daily balance and accrued interest in the Master Accounts"); 2016 Amendment, p. 2; TD 2017 Ameritrade Client Agreement at https://web.archive.org/web/20171013124829/https://www.tdameritrade.com/retailen us/resources/pdf/AMTD182.pdf ("2017 Client Agreement"), p. 5 ("My account statement will display ... the balance of deposits at each Program Bank [and] any withdrawals made during the month").
- 89. In addition, as part of its FDIC Insured Deposit Account program, TD Ameritrade electronically received client data for deposits and/or transfers to and withdrawals and/or transfers from client accounts through the internet. *See* 2018 Form 10-K, p. 13 ("We receive and process trade orders through a variety of electronic channels, including the Internet, mobile trading applications and our interactive voice response system. These methods of trading are heavily dependent on the integrity of the electronic systems supporting them."); *see also* 2017 Cash Management Services ("With Online Cash Services you can quickly and easily...[s]et up free recurring bill payments—and save time with online bill pay...move money between TD

Ameritrade accounts...[a]nd [s]ecurely deposit checks").

90. For example, in order for TD Ameritrade to allow clients to "trade, invest, spend and pay bills from one TD Ameritrade account" through its Online Cash Services, account and fund information was received and stored in an electronic database accessible by a computer:

Avoid Unnecessary Charges and Fees

- . No monthly maintenance fees
- . Unlimited check writing and free standard 100 re-orders.
- . Free online bill pay
- Avoid ATM fees—you get reimbursed for any ATM charges nationwide

Get On With Your Day Fast and Free with Online Cash Services

Paying bills, making purchases, and moving funds around is just a part of life. But that doesn't mean it should be hard or take up your whole day. With Online Cash Services, you can quickly and easily:

- Set up free recurring bill payments—and save time with online bill pay
- Enjoy added convenience with Apple Pay on your Visa® debit card issued by TD Bank USA, N.A.
- · Easily move money between TD Ameritrade accounts
- Securely deposit checks using the TD Ameritrade Mobile app on your smartphone or tablet

See 2017 Cash Management Services; see also 2018 Form 10-K, p. 13 ("We receive and process trade orders through a variety of electronic channels, including the Internet, mobile trading applications and our interactive voice response system. These methods of trading are heavily dependent on the integrity of the electronic systems supporting them."); "About Us" ("In 2010 and 2011 the company embraced mobile devices by developing trading application for the Android, iPhone, and iPad.").

91. In order to perform its role as a recordkeeper, maintain respective client accounts, and prepare client statements, TD Ameritrade, including TDAC, accessed such client account and aggregated deposit account information, as well as, at least, electronic check deposit data and internet bill paying data, stored in the electronic database. *See* 2018 Form 10-K, pp. 8-9 ("TDAC provides the following back office functions: maintaining client accounts;...preparing client...statements;...possession, control and safeguarding of funds...in client

accounts;...processing cash sweep transactions to and from bank deposit accounts"); 2017 Cash Management Services.

- 92. As part of its FDIC Insured Deposit Account program, TD Ameritrade, including TDAC, TDATC and Scottrade, administered aggregated deposit accounts to transfer funds of its clients that had been accepted into their respective brokerage accounts to either the aggregated deposit accounts held in TD Ameritrade's TD Bank and TD Bank USA, or aggregated deposit accounts at third-party depository financial institutions. *See* 2013 IDA, pp. 5-6, 14; 2018 Form 10-K, p. 87.
- As discussed above, in the context of managing the FDIC Insured Deposit Accounts, TD Ameritrade, including TDAC, TDATC, and Scottrade, acted as the authorized agent, nominee, custodian and messenger for each of their respective clients and are responsible for making deposits to the aggregated deposit accounts established by TD Ameritrade at its Program Banks, including TD Bank and TD Bank USA. *See* 2013 IDA, pp. 5-6. For example, TDAC allocated client funds into an aggregated deposit account so that "an amount that is less than or equal to each TDAC Customer's FDIC deposit insurance limit [was] deposited in the TDAC Master Account at TD Bank." *See* 2013 IDA, p. 14. TD Ameritrade deposited up to \$247,500 in each Program Bank, per depositor per legal capacity. *See* 2017 Client Agreement.
- 94. If funds of clients in aggregated "Master Accounts" at TD Ameritrade equaled or exceeded the specified amount, TD Ameritrade, including TDAC, TDATC and Scottrade, deposited such additional funds to aggregated deposit accounts at other third-party depository financial institutions. *See* 2013 IDA, p. 14 ("The Depository Institutions recognize that the Ameritrade Companies may enter into agreements in respect of Money Market Deposit Accounts with other depository institutions for...the purpose of providing FDIC insurance to Customer

Accounts that exceed the Depository Institutions' FDIC deposit insurance limits"); 2016 Amendment, pp. 2-3.

95.

- As part of its FDIC Insured Deposit Account program, in addition to automatically investing or depositing client funds into the Insured Deposit Account chosen as a "Designated Sweep Vehicle," TD Ameritrade automatically withdrew client funds from an aggregated deposit account more than six times during a month to satisfy client obligations, while preserving the insured and interest-bearing status of the aggregated deposit account. See TD Ameritrade 2016 Client Agreement at https://web.archive.org/web/20160523235550/https://www.tdameritrade.com/retailen us/resources/pdf/AMTD182.pdf ("2016 Client Agreement"), pp. 4-5. For example, as discussed above, in the context of managing the FDIC Insured Deposit Accounts, TD Ameritrade, including TDAC, TDATC, and Scottrade, acted as the messenger for each of their respective
- 96. Funds were automatically withdrawn from a customer's cash sweep vehicle (i.e., Insured Deposit Account) to satisfy any debits created in the client's brokerage account due to the purchase of securities or withdrawal request. See 2016 Cash Balance Programs Summary, p. 1.

clients and were responsible for determining and making appropriate withdrawals from the

respective aggregated deposit accounts. See 2013 IDA, pp. 5-6; 2016 Amendment, p. 2.

- 97. Withdrawals were "made no more than once a day on any Business Day pursuant to instructions delivered by TDAC or TDATC, as applicable If directed by TDAC, TDATC or their respective messenger, as applicable, the Depository Institution will transfer funds to accounts at another depository institution." See 2013 IDA, p. 15.
- 98. In order to maintain client accounts (see 2018 Form 10-K, p. 8-9), TD Ameritrade, including TDAC, TDATC, and Scottrade, updated the electronic database based on the transfers

to and withdrawals from aggregated deposit accounts. *See* 2013 IDA, pp. 5-6; 2016 Amendment, p. 2.

- 99. Acting as the recordkeeper in maintaining client account information, and continuing its role as authorized agent, custodian, and messenger of each respective client, TD Ameritrade, including TDAC and TDAC, would "receive evidence of the Depository Institution's receipt of the withdrawal and transfer instructions for same day funds representing the total of such withdrawals to be made." *See* 2013 IDA, p. 15. Such information was updated in the electronic database and used to provide the offered Online Cash Services. *See* 2017 Cash Management Services; 2016 Client Agreement, p. 5 ("My account statement will reflect the balances, activity, and interest earned with respect to the [Insured Deposit Accounts]."); 2017 Client Agreement, p. 5 (My account statement will display...the balance of deposits of each Program Bank, [and] any withdrawals made during the month.").
- 100. In addition, as part of its FDIC Insured Deposit Account program, TD Ameritrade distributed the interest earned from aggregated deposit accounts to respective client accounts and updated electronic databases with such information. *See* 2016 Client Agreement, p. 5 ("My account statement will reflect the balances, activity, and interest earned with respect to the [Insured Deposit Accounts]."); 2017 Client Agreement, p. 5 ("My account statement will display ... the amount of interest earned on my deposits"); 2013 IDA, p. 16 ("As agents and custodians for the Customers, [TD Ameritrade, including TDAC and TDATC,] [maintained], in good faith and in the regular course of business, and in accordance with applicable published requirements of the FDIC (including, without limitation, FDIC requirements for pass-through deposit insurance coverage), books and records setting forth the daily balance and accrued interest in the Customer Accounts.").

TD Ameritrade's Insured Deposit Account Product From October 2018 Through March 2020

- "offer[ed] a cash sweep program to enable [clients] to earn interest on cash balances in [the clients'] TD Ameritrade account." See December 2020 Summary of Cash Sweep Program at https://www.tdameritrade.com/retail-en_us/resources/pdf/TDA7002.pdf ("2020 Cash Sweep Program Summary"); see also Amendment to the Insured Deposit Account Agreement dated November 24, 2019 ("2019 Amendment"), p. 2 ("Schwab will cause...its subsidiaries that are broker-dealers as of the Closing, including Charles Schwab & Co., Inc. and the TDA Broker Dealers...to make available to their Customers the sweep program contemplated by this Agreement to the extent for Schwab to satisfy its obligations hereunder and will cause the Broker Dealers to take all other actions required of them pursuant to this Agreement.").
- 102. TD Ameritrade collected over one \$1 billion in bank deposit account fee revenue generated by its deposit sweep products between October 2018 through at least September 2019, and \$899 million from October 2019 through at least March 31, 2020, by practicing the method claimed in the Tiered Interest Rate Patent: *See* Form 10-K for the Fiscal Year Ended September 30,

 2019

 https://www.sec.gov/Archives/edgar/data/1173431/000117343119000117/amtd2019093010k.ht
- m ("2019 Form 10-K"), p. 36. See Form 10-Q for the Quarterly Period Ended March 31, 2020 https://sec.report/Document/0001173431-20-000062/ ("March 31, 2020 Form 10-Q"), p. 31.
- 103. TD Ameritrade's "FDIC Insured Deposit Account" "serve[d] as the primary cash sweep vehicle for earning income on cash balances in TD Ameritrade brokerage accounts and is the default cash sweep vehicle..." See 2020 Cash Sweep Program Summary.
 - 104. Thus, TD Ameritrade practiced, as part of its FDIC Insured Deposit Account

program during this period, a method for managing funds of respective client brokerage accounts participating in TD Ameritrade's FDIC Insured Deposit Account program.

- 105. In the context of managing the FDIC Insured Deposit Accounts, TD Ameritrade, including TDAC and TDATC, acted as the authorized agent, nominee, custodian and messenger for each of their respective clients and established and maintained, made deposits to and withdrawals from, and effected other transactions from the respective aggregated deposit accounts established by TD Ameritrade at its program banks, including TD Bank and TD Bank USA.
- 106. As Section 1 of the 2013 IDA makes clear, TDAC and TDATC directly performed infringing acts that are the basis of this Complaint. 2013 IDA, pp. 5-6 ("[TDAC/TDATC will act as the authorized agent, nominee, custodian and messenger of each [TDAC/TDATC] Customer...in establishing, maintain, making deposits to and withdrawals from, and effecting other transactions in the [TDAC/TDATC] Master Accounts established and maintained by [TDAC/TDATC] in [their] name."; "[TDAC/TDATC] hereby agree[] to act as recordkeeper in maintaining the information set forth in Section 10 with respect to the [TDAC/TDATC] Customer Accounts.").
- 107. The 2013 IDA also makes clear that TDA directly performed, and/or induced TDAC and TDATC to perform, infringing acts that are the basis of this Complaint. 2013 IDA, pp. 4-5 ("WHEREAS, TDA desires to make the Money Market Deposit Account available, either as designated Money Market Deposit Account sweep vehicle or as a non-sweep deposit account to its customers"; "WHEREAS, the parties intend that the Customer Accounts will be eligible for federal deposit insurance by the FDIC for the maximum aggregate amount of principal and interest available with respect to each Customer's aggregate deposits maintained in a single recognized legal capacity").

- 108. Furthermore, the 2019 Amendment to the 2013 IDA makes clear that Schwab caused TDAC and TDATC to participate in and perform infringing acts that are the basis of this Complaint. 2019 Amendment, p. 2 ("Schwab will cause (i) its subsidies that are broker-dealers as of the Closing, including Charles Schwab & Co., Inc. and the TDA Broker-Dealers [TDAC and TDATC]...to make available to their Customers the sweep program contemplated by this Agreement to the extend necessary for Schwab to satisfy its obligations hereunder and will cause the Broker-Dealers to take all other actions required of them pursuant to this Agreement.").
- 109. As part of its FDIC Insured Deposit Account program, TD Ameritrade, including TDAC and TDATC, maintained funds of a plurality of clients, with each client account in a subset of the plurality of client accounts, with each of the respective client accounts in the subset having funds deposited in a plurality of FDIC-insured and interest-bearing aggregated deposit accounts. For example, TD Ameritrade was responsible for "maintaining, making deposits to and withdrawals from, and effecting other transactions in the Master Accounts" at the respective depository institution. *See* 2019 Amendment, p. 2; 2013 IDA, pp. 5-6.
- 110. "The sweep program [was] offered to eligible clients whereby the client's uninvested cash is swept into FDIC-insured (up to specific limits) money market deposit accounts at the Sweep Program Counterparties." *See* 2019 Form 10-K, p. 87; March 31, 2020 Form 10-Q, p. 22. Client funds deposited into the provided aggregated deposit accounts earned interest in accordance with the rate or tiered rates available to the respective client as determined by TD Ameritrade, regardless of which Program Bank held the funds. *See* 2020 Cash Sweep Program Summary, p. 1.
- 111. "The bank sweep program [was] designed to provide [clients] with access to at least two Program Banks." *See* 2020 Cash Sweep Program Summary, p. 2. As part of the FDIC Insured

Deposit Account program, TD Ameritrade "deposit[ed] up to \$247,500 in each Program Bank, per depositor per legal capacity, except for 'the Excess Bank,' which [received] deposits without limit, even if the amount in the IDA exceed[ed] the FDIC insurance available to [the client]." *Id.*, p. 1. TD Ameritrade maintained each client's balance of deposits at each Program Bank. *See* TD Ameritrade 2019 Client Agreement at https://web.archive.org/web/20190924032251/https://www.tdameritrade.com/retail-en_us/resources/pdf/AMTD182.pdf ("2019 Client Agreement"), p. 6 ("My account statement will display the name of each Program Bank with which I have deposits [and] the balance of deposits at each Program Bank.").

In addition, TD Ameritrade maintained a balance of funds for each respective client 112. account, as well as information on funds held by clients in the plurality of aggregated deposit accounts. Acting as a recordkeeper, TD Ameritrade, including TDAC and TDATC, maintained information with respect to client accounts and each aggregated deposit account. See 2019 Amendment, pp. 2, 10; 2013 IDA, pp. 5-6, 16; see also 2019 Client Agreement, p. 6 ("My account statement will display...the balance of deposits at each Program Bank [and] any withdrawals made TD during the month"); Ameritrade 2020 Client Agreement at https://web.archive.org/web/20200903075157/https://www.tdameritrade.com/retailen us/resources/pdf/AMTD182.pdf ("2020 Client Agreement"), p. 6. For example, "[a]s agent and custodian for the Customers, [TD Ameritrade, including TDAC and TDATC,] [maintained], in good faith and in the regular course of business, and in accordance with applicable published requirements of the FDIC (including, without limitation, FDIC requirements for pass-through deposit insurance coverage), books and records setting forth the daily balance and accrued interest in the Customer Accounts." See 2019 Amendment, p. 10; 2013 IDA, p. 16 ("As agents and

custodians for the Customers [TD Ameritrade, including TDAC and TDATC,] [maintained], in good faith and in the regular course of business, and in accordance with applicable published requirements of the FDIC (including, without limitation, FDIC requirements for pass-through deposit insurance coverage), books and records setting forth the daily balance and accrued interest in the Master Accounts at the Depository Institutions").

- As part of its FDIC Insured Deposit Account program, TD Ameritrade, including 113. TDAC and TDATC, received electronic client transaction data describing credit or debit transactions against the client's respective account. For example, as part of its Online Cash Services, clients were able to pay bills, make purchases, move funds, and were provided with a debit card. See TD Ameritrade Cash Management Services Webpage at https://www.tdameritrade.com/investment-products/cash-solutions/cash-services.html ("Cash Management Services") ("With Online Cash Services, you can quickly and easily: Set up free recurring bill payments - and save time with online bill pay; enjoy added convenience with Apple Pay on your Visa® debit card issued by TD Bank USA, N.A., [and] easily move money between TD Ameritrade accounts"); 2018 Form 10-K, p. 13 ("We receive and process trade orders through a variety of electronic channels, including the Internet, mobile trading applications and our interactive voice response system. These methods of trading are heavily dependent on the integrity of the electronic systems supporting them."). Such orders were made through TD Ameritrade's "Online Cash Services" (see TD Ameritrade Cash Management Services), or through the trading applications it has developed for mobile devices, including the Android, iPhone, and iPad. See Cash Management Services; 2017 Cash Management Services; see also 2018 Form 10-K, p. 13; "About Us."
 - 114. Thus, since TD Ameritrade was responsible for making deposits to and

withdrawals from, and effecting other transactions in. aggregated deposit accounts, in order to, for example, withdraw funds from a client's cash sweep vehicle in response to a withdrawal request or to satisfy any debits created in a client brokerage account, TD Ameritrade electronically received client transaction data. *See* 2019 Amendment, p. 2; 2013 IDA, pp. 5-6; 2020 Cash Sweep Program Summary, p. 1.

- 115. Withdrawals from the aggregated "Master Account" were only made "pursuant to instructions delivered" to depository institutions by TD Ameritrade. *See* 2019 Amendment, p. 9; 2013 IDA, p. 15. TD Ameritrade would then "receive evidence of the Depository Institution's receipt of the withdrawal and transfer instructions for same day funds representing the total of such withdrawals to be made to such Broker-Dealer as agent for its Customers." *See* 2019 Amendment, p. 9; 2013 IDA, p. 15. As described above, TD Ameritrade, including TDAC and TDATC, acting as recordkeeper, recorded and updated such transactions in order to accurately provide clients with its Online Cash Services. *See* 2019 Amendment, pp. 2, 10; 2013 IDA, pp. 5-6, 16; *see also* 2019 Client Agreement, p. 6 ("My account statement will display...the balance of deposits at each Program Bank [and] any withdrawals made during the month"); 2020 Client Agreement, p. 6.
- 116. As part of its FDIC Insured Deposit Account program, TD Ameritrade electronically determined a respective interest rate from among a plurality of interest rates based at least in part on the balance of funds associated with the respective client account. For example, TD Ameritrade offered clients interest on deposits in the FDIC-insured deposit accounts "in accordance with the rates or tiered rates available to [the client] as determined by TD Ameritrade." 2020 Cash Sweep Program, p. 1.
- 117. Such rates varied based on the particular offering or level of assets held by clients with TD Ameritrade. See 2020 Cash Sweep Program, p. 1. "TD Ameritrade use[d] the daily

balance method to calculate interest on [a client's] Account." Id.

118. For example, TD Ameritrade provided its clients the following tiered interest rates based on the dollar range of assets held with TD Ameritrade on behalf of its clients, at various points from 2018 to 2020 (*see* effective dates noted on rate charts):

TD Ameritrade FDIC Insured Deposit Account Rates-Core Effective October 5, 2018. Subject to change without prior notice. Please call 800-669-3900.		
\$0.01 - \$4,999.99	0.05%	0.05%
\$5,000.00 - \$24,999.99	0.06%	0.06%
\$25,000.00 - \$99,999.99	0.07%	0.07%
\$100,000.00 - \$199,999.99	0.09%	0.09%
\$200,000.00 - \$499,999.99	0.15%	0.15%
\$500,000.00 - \$999,999.99	0.30%	0.30%
\$1,000,000 +	0.45%	0.45%

TD Ameritrade FDIC Insured Deposit Account Rates-Plus

Effective October 5, 2018. Subject to change without prior notice. Please call 800-669-3900. The Plus IDA is a program for TD Ameritrade clients with \$1 million or more in assets.**

Dollar Range	Interest Rate	Annual Percentage Yield
\$0.01 - \$4,999.99	0.06%	0.06%
\$5,000.00 - \$24,999.99	0.07%	0.07%
\$25,000.00 - \$99,999.99	0.10%	0.10%
\$100,000.00 - \$199,999.99	0.15%	0.15%
\$200,000.00 - \$499,999.99	0.30%	0.30%
\$500,000.00 - \$999,999.99	0.50%	0.50%
\$1,000,000 +	0.65%	0.65%

https://web.archive.org/web/20181010140345/https://www.tdameritrade.com/pricing/margin-

and-interest-rates.page

TD Ameritrade FDIC Insured Deposit Account Rates-Core

Effective January 11, 2019. Subject to change without prior notice. Please call 800-669-3900.

0.07% 0.08% 0.10%
0.10%
0.12%
0.20%
0.35%
0.50%

TD Ameritrade FDIC Insured Deposit Account Rates-Plus

Effective January 11, 2019. Subject to change without prior notice. Please call 800-669-3900. The Plus IDA is a program for TD Ameritrade clients with \$1 million or more in assets."

Interest Rate	Annual Percentage Yield
0.10%	0.10%
0.13%	0.13%
0.15%	0.15%
0.19%	0.19%
0.34%	0.34%
0.55%	0.55%
0.70%	0.70%
	0.13% 0.15% 0.19% 0.34% 0.55%

 $\underline{https://web.archive.org/web/20190322024015/https://www.tdameritrade.com/pricing/margin-and-interest-rates.page}$

TD Ameritrade FDIC Insured Deposit Account Rates-Core

Effective October 10, 2019. Subject to change without prior notice. Please call 800-669-3900.

Dollar Range	Interest Rate	Annual Percentage Yield
\$0.01 - \$4,999.99	0.01%	0.01%
\$5,000.00 - \$24,999.99	0.01%	0.01%
\$25,000.00 - \$99,999.99	0.02%	0.02%
\$100,000.00 - \$199,999.99	0.04%	0.04%
\$200,000.00 - \$499,999.99	0.07%	0.07%
\$500,000.00 - \$999,999.99	0.10%	0.10%
\$1,000,000 +	0.35%	0.35%

TD Ameritrade FDIC Insured Deposit Account Rates-Plus

Effective October 10, 2019. Subject to change without prior notice. Please call 800-669-3900. The Plus IDA is a program for TD Ameritrade clients with \$1 million or more in assets.**

Dollar Range	Interest Rate	Annual Percentage Yield
\$0.01 - \$4,999.99	0.02%	0.02%
\$5,000.00 - \$24,999.99	0.02%	0.02%
\$25,000.00 - \$99,999.99	0.05%	0.05%
\$100,000.00 - \$199,999.99	0.07%	0.07%
\$200,000.00 - \$499,999.99	0.10%	0.10%
\$500,000.00 - \$999,999.99	0.12%	0.12%
\$1,000,000 +	0.50%	0.50%

 $\underline{https://web.archive.org/web/20191011184328/https://www.tdameritrade.com/pricing/margin-and-interest-rates.page}$

TD Ameritrade FDIC Insured Deposit Account Rates-Core

Effective November 11, 2019. Subject to change without prior notice. Please call 800-669-3900.

Dollar Range	Interest Rate	Annual Percentage Yield
\$0.01 - \$4,999.99	0.01%	0.01%
\$5,000.00 - \$24,999.99	0.01%	0.01%
\$25,000.00 - \$99,999.99	0.01%	0.01%
\$100,000.00 - \$199,999.99	0.01%	0.01%
\$200,000.00 - \$499,999.99	0.02%	0.02%
\$500,000.00 - \$999,999.99	0.05%	0.05%
\$1,000,000 +	0.25%	0.25%

TD Ameritrade FDIC Insured Deposit Account Rates-Plus

 $Effective \ November\ 11, 2019.\ \ Subject\ to\ change\ without\ prior\ notice.\ Please\ call\ 800-669-3900.$

The Plus IDA is a program for TD Ameritrade clients with \$1 million or more in assets. **

Dollar Range	Interest Rate	Annual Percentage Yield
\$0.01 - \$4,999.99	0.02%	0.02%
\$5,000.00 - \$24,999.99	0.02%	0.02%
\$25,000.00 - \$99,999.99	0.02%	0.02%
\$100,000.00 - \$199,999.99	0.03%	0.03%
\$200,000.00 - \$499,999.99	0.05%	0.05%
\$500,000.00 - \$999,999.99	0.06%	0.06%
\$1,000,000 +	0.30%	0.30%

 $\underline{https://web.archive.org/web/20200303142412/https://www.tdameritrade.com/pricing/margin-and-interest-rates.page}$

TD Ameritrade FDIC Insured Deposit Account Rates-Core

Effective March 17, 2020. Subject to change without prior notice. Please call 800-669-3900.

Dollar Range	Interest Rate	Annual Percentage Yield
\$0.01 - \$4,999.99	0.01%	0.01%
\$5,000.00 - \$24,999.99	0.01%	0.01%
\$25,000.00 - \$99,999.99	0.01%	0.01%
\$100,000.00 - \$199,999.99	0.01%	0.01%
\$200,000.00 - \$499,999.99	0.01%	0.01%
\$500,000.00 - \$999,999.99	0.01%	0.01%
\$1,000,000 +	0.01%	0.01%

TD Ameritrade FDIC Insured Deposit Account Rates-Plus

Effective March 17, 2020. Subject to change without prior notice. Please call 800-669-3900. The Plus IDA is a program for TD Ameritrade clients with \$1 million or more in assets.**

Dollar Range	Interest Rate	Annual Percentage Yield
\$0.01 - \$4,999.99	0.01%	0.01%
\$5,000.00 - \$24,999.99	0.01%	0.01%
\$25,000.00 - \$99,999.99	0.01%	0.01%
\$100,000.00 - \$199,999.99	0.01%	0.01%
\$200,000.00 - \$499,999.99	0.01%	0.01%
\$500,000.00 - \$999,999.99	0.01%	0.01%
\$1,000,000 +	0.01%	0.01%

 $\underline{https://web.archive.org/web/20190729204735/https://www.tdameritrade.com/pricing/margin-and-interest-rates.page}$

- 119. As part of its FDIC Insured Deposit Account program, TD Ameritrade, electronically calculated a respective interest for a period to each respective client account, determined based on the respective interest rate, independent from the respective client account pro rata share in earnings posted to aggregated deposit accounts. For example, rather than apply the same interest rate on all funds held in an aggregated deposit account and distribute the earnings on a *pro rata* basis, "[t]he interest rate to be paid on funds in the Customer Accounts [varied] depending on the value of the Customer's assets including funds on deposit in such Customer's Customer Accounts." *See* 2019 Amendment, p. 4; 2013 IDA, pp. 7-8.
- 120. As part of its FDIC Insured Deposit Account program, TD Ameritrade used the applicable tiered rate and "the daily balance method to calculate" interest for a client for a given period. *See* 2020 Cash Sweep Program Summary, p. 1. "Interest [was] accrue[d] on balances from the day they [were] deposited into the IDAs through the business day preceding the date of withdrawal from the IDA. Interest [was] accrue[d] daily and credited on the last business day of each month." *Id*.
- 121. The calculated respective interest was then posted to respective client accounts. *See, e.g.,* 2019 Client Agreement, p. 6 ("My account statement will display...the applicable interest rate and amount of interest earned on my deposits."); 2020 Client Agreement, p. 6; 2013 IDA, p. 16; 2019 Amendment, p. 10 ("As agent and custodian for the Customers, [TD Ameritrade, including TDAC and TDATC,] [maintained], in good faith and in the regular course of business, and in accordance with applicable published requirements of the FDIC (including, without limitation, FDIC requirements for pass-through deposit insurance coverage), books and records setting forth the daily balance and accrued interest in the Customer Accounts.").

TD Ameritrade's Insured Deposit Account Product From June 2015 through March 15, 2021

- 122. From at least June 2015 through at least March 15, 2021, TD Ameritrade "offer[ed] a cash sweep program to enable [clients] to earn interest on cash balances in [the clients'] TD Ameritrade account." 2020 Cash Sweep Balance Program Summary; *see also* 2019 Amendment, p. 2 ("Schwab will cause...its subsidiaries that are broker-dealers as of the Closing, including Charles Schwab & Co., Inc. and the TDA Broker Dealers...to make available to their Customers the sweep program contemplated by this Agreement to the extent for Schwab to satisfy its obligations hereunder and will cause the Broker Dealers to take all other actions required of them pursuant to this Agreement.").
- 123. During this period, TD Ameritrade collected over six \$6 billion in bank deposit account fee revenue generated by its deposit sweep products between October 2016 through at least March 31, 2020 by practicing the method claimed in the Debit Card Patent. *See* 2018 Form 10-K, p. 35; 2019 Form 10-K, p. 36; March 31, 2020 Form 10-Q, p. 31.
- 124. TD Ameritrade's "FDIC Insured Deposit Account" "serve[d] as the primary cash sweep vehicle for earning income on cash balances in TD Ameritrade brokerage accounts and is the default cash sweep vehicle..." *See* 2020 Cash Sweep Program Summary; 2016 Cash Balance Programs Summary.
- 125. As part of its FDIC Insured Deposit Account program during this period, TD Ameritrade, including TDAC, TDATC, and Scottrade, practiced a method for managing a plurality of client accounts for a plurality of clients through the use of one or more computers.
- 126. As Section 1 of the 2013 IDA makes clear, TDAC and TDATC directly performed infringing acts that are the basis of this Complaint. 2013 IDA, pp. 5-6 ("[TDAC/TDATC will act as the authorized agent, nominee, custodian and messenger of each [TDAC/TDATC]

Customer...in establishing, maintain, making deposits to and withdrawals from, and effecting other transactions in the [TDAC/TDATC] Master Accounts established and maintained by [TDAC/TDATC] in [their] name."; "[TDAC/TDATC] hereby agree[] to act as recordkeeper in maintaining the information set forth in Section 10 with respect to the [TDAC/TDATC] Customer Accounts.").

- 127. The 2013 IDA also makes clear that TDA directly performed, and/or induced TDAC and TDATC to perform, infringing acts that are the basis of this Complaint. 2013 IDA, pp. 4-5 ("WHEREAS, TDA desires to make the Money Market Deposit Account available, either as designated Money Market Deposit Account sweep vehicle or as a non-sweep deposit account to its customers"; "WHEREAS, the parties intend that the Customer Accounts will be eligible for federal deposit insurance by the FDIC for the maximum aggregate amount of principal and interest available with respect to each Customer's aggregate deposits maintained in a single recognized legal capacity").
- 128. As the 2016 Amendment to the 2013 IDA makes clear, Scottrade (the liabilities of which were assumed by TDHC) also directly performed infringing acts that are the basis of this Complaint. 2016 Amendment, p. 2 ("Ameritrade Parent [TDHC] will cause Scottrade to perform the functions contemplated by Section 1 of the [2013] IDA Agreement with respect to the Scottrade Master Accounts on the same terms and subject to the same conditions as set forth therein.").
- 129. Further, the 2016 Amendment also makes clear that TDHC caused Scottrade to participate in and perform infringing acts that are the basis of this Complaint. 2016 Amendment, p. 2 ("Ameritrade Parent [TDHC] will cause Scottrade to perform the functions contemplated by Section 1 of the [2013] IDA Agreement with respect to the Scottrade Master Accounts on the same terms and subject to the same conditions as set forth therein.").

- 130. Furthermore, the 2019 Amendment to the 2013 IDA makes clear that Schwab caused TDAC and TDATC to participate in and perform infringing acts that are the basis of this Complaint. 2019 Amendment, p. 2 ("Schwab will cause (i) its subsidies that are broker-dealers as of the Closing, including Charles Schwab & Co., Inc. and the TDA Broker-Dealers [TDAC and TDATC]...to make available to their Customers the sweep program contemplated by this Agreement to the extend necessary for Schwab to satisfy its obligations hereunder and will cause the Broker-Dealers to take all other actions required of them pursuant to this Agreement.")
- variety of electronic channels, including the Internet [and] mobile trading applications...[which] are heavily dependent on the integrity of the electronic systems supporting them." *See* 2018 Form 10-K, p. 13. Such orders were made through TD Ameritrade's "Online Cash Services" (*see* TD Ameritrade Cash Management Services), or through the trading applications it has developed for mobile devices, including the Android, iPhone, and iPad. *See* Cash Management Services; 2017 Cash Management Services; *see also* 2018 Form 10-K, p. 13 ("We receive and process trade orders through a variety of electronic channels, including the Internet, mobile trading applications and our interactive voice response system. These methods of trading are heavily dependent on the integrity of the electronic systems supporting them."); "About Us" ("In 2010 and 2011 the company embraced mobile devices by developing trading application for the Android, iPhone, and iPad.").
- 132. As part of its FDIC Insured Deposit Account program, TD Ameritrade swept its clients' uninvested cash into "FDIC-insured (up to specified limits) money market deposit accounts at' depository financial institutions. *See* 2018 Form 10-K, p. 87; *see also* 2013 IDA, p. 4 ("[O]ne or more omnibus [i.e., aggregated] Money Market Deposit Accounts representing

individual Money Market Deposit Accounts of [TD Ameritrade, including TDAC, TDATC, and Scottrade,] Customers will be established and maintained at TD Bank USA in the name of [TDAC/TDATC/Scottrade] as agent and custodian for its customers"); 2020 Cash Sweep Program Summary ("In the unlikely event that a Program Bank should fail, each depositor with IDA balances is insured, up to the \$250,000 limit").

- 133. In addition, as part of its FDIC Insured Deposit Account program, TD Ameritrade could hold the client account funds in aggregated deposit accounts at different depository financial institutions, as "[t]he bank sweep program [was] designed to provide [clients] with access to at least two Program Banks". *See* 2020 Cash Sweep Program Summary, p. 2. Currently, the Program Banks include TD Bank N.A., TD Bank USA, N.A., USA Bank N.A., Citibank, N.A., Wells Fargo Bank, N.A., to name a few. *See* TD Ameritrade IDA Program Banks at https://www.tdameritrade.com/retail-en_us/resources/pdf/TDA1000713.pdf.
- 134. In managing the client accounts, TD Ameritrade acted as the recordkeeper in maintaining information of client accounts and as the authorized agent and custodian in maintaining and effecting transactions in aggregated deposit accounts. *See* 2013 IDA, pp. 5-6, 16; 2016 Amendment, pp. 1-2; 2019 Amendment, pp. 2-3, 10 ("As agent and custodian for the Customers, [TD Ameritrade, including TDAC and TDATC,] [maintained], in good faith and in the regular course of business, and in accordance with applicable published requirements of the FDIC (including, without limitation, FDIC requirements for pass-through deposit insurance coverage), books and records setting forth the daily balance and accrued interest in the Customer Accounts."); *see also* 2020 Client Agreement, p. 6 ("My account statement will display...the balance of deposits at each Program Bank [and] any withdrawals made during the month"); 2019 Client Agreement, p. 6; 2017 Client Agreement, p. 5. For example, TD Ameritrade was

responsible for preparing client statements, the "possession, control and safeguarding of funds and securities in client accounts," and "processing cash sweep transactions to and from bank deposit accounts and money market mutual funds." *See* 2018 Form 10-K, pp. 8-9.

- 135. Thus, TD Ameritrade accessed databases including information for individual client accounts and respective client funds held in aggregated deposit accounts at banking institutions.
- administered deposits to and withdrawals from client accounts, including more than six withdrawals in a month, with withdrawals made by debit card and/or check. For example, clients were provided "the freedom to access, spend, and manage [their] money...with a debit card [and/or] free check writing." *See* Cash Management Services ("Paying bills, making purchases, and moving funds around is just a part of life...With Online Cash Services, you can quickly and easily....enjoy added convenience with Apple Pay on your Visa® debit card issued by TD Bank USA, N.A. [and] securely deposit checks using the TD Ameritrade Mobile app on your smartphone or tablet."); *see also* 2017 Cash Management Services.
- 137. As part of its FDIC Insured Deposit Account program, and in order to properly maintain and make deposits to and withdrawals from aggregated deposit accounts, TD Ameritrade, including TDAC, TDATC, and Scottrade, determined, on a daily basis, net transactions as sums of deposits to and withdrawals from client accounts. *See* 2013 IDA, p. 4; 2016 Amendment, pp. 1-2; 2019 Amendment, p. 1; *see also* 2020 Cash Sweep Program Summary. For example, TD Ameritrade netted the withdrawals and deposits of individual client accounts, and used those netting results in order to determine the necessary net transaction to and from aggregated deposit accounts. *See* 2020 Cash Sweep Program Summary, p. 1. Thus, based on the net transaction result,

TD Ameritrade determined whether to deposit or withdraw funds from aggregated deposit accounts.

- 138. In addition, as part of its FDIC Insured Deposit Account program, TD Ameritrade, including TDAC, TDATC and Scottrade, acted as the authorized agent and messenger of each client in making deposits to and withdrawals from, and effecting other transactions in aggregated deposit accounts. *See* 2013 IDA, pp. 5-6; 2016 Amendment, p. 2; 2019 Amendment, p. 2. All withdrawals were made no more than once a day pursuant to instructions delivered by TD Ameritrade, including TDAC, TDATC and Scottrade, which subsequently "receive[d] evidence of the Depository Institution's receipt of the withdrawal and transfer instructions for same day funds representing the total of such withdrawals to be made." *See* 2013 IDA, p. 15; 2019 Amendment, p. 9.
- 139. On information and belief, such withdrawals from aggregated deposit accounts managed by TD Ameritrade, including TDAC, TDATC, and Scottrade, as discussed above, were made no more than once on any business day (*i.e.*, more than six withdrawals in a month) (*see* 2013 IDA, p. 15; 2019 Amendment, p. 9) through an intermediate bank. *See* TD Ameritrade Wire Transfer

 Form

 at https://www.tdameritrade.com/content/dam/tda/retail/marketing/en/pdf/TDA111.pdf (identifies Wells Fargo Bank N.A. as current intermediate bank).
- 140. In order to properly maintain client accounts and assume responsibility as a recordkeeper, TD Ameritrade updated the database with deposits to and withdrawals from such client accounts to provide its clients with the services that are offered as part of the Online Cash Services. *See* Cash Management Services; 2013 IDA, pp. 5-6, 16; 2016 Amendment, pp. 1-2; 2019 Amendment, pp. 2-3, 10 ("As agent and custodian for the Customers, [TD Ameritrade, including

TDAC and TDATC,] [maintained], in good faith and in the regular course of business, and in accordance with applicable published requirements of the FDIC (including, without limitation, FDIC requirements for pass-through deposit insurance coverage), books and records setting forth the daily balance and accrued interest in the Customer Accounts."); 2018 Form 10-K, pp. 8-9; see also 2020 Client Agreement, p. 6 ("My account statement will display...the balance of deposits at each Program Bank [and] any withdrawals made during the month"); 2019 Client Agreement, p. 6; 2017 Client Agreement, p. 5.

141. In addition, TD Ameritrade held funds in interest-bearing aggregated deposit accounts that were not FDIC-insured, as a "sweep to a money market mutual fund [was] another [cash sweep vehicle] option for certain eligible clients," which is not FDIC-insured. *See* 2021 Summary of Cash Balance Programs, p. 1 ("[Money market funds] are not insured or guaranteed by the FDIC, any other government agency, or TD Ameritrade, and there can be no assurance that such funds will be able to maintain a stable net asset value of \$1 per share."). TD Ameritrade, including TDAC, TDATC, and Scottrade, remained responsible for maintaining information in databases on client funds held in a money market fund and determined whether to deposit or withdraw funds from such account. *See* 2020 Client Agreement, p. 7 ("I understand that I will receive period statements for sweep transactions involving money market funds"); *see also* 2016 Client Agreement, p. 6; 2017 Client Agreement, p. 5; 2019 Client Agreement, p. 6.

FIRST CAUSE OF ACTION: PATENT INFRINGEMENT AGAINST TD AMERITRADE ('551 PATENT)

- 142. Island realleges the prior paragraphs as if fully set forth herein.
- 143. On April 14, 2009, the '551 Patent was duly and legally issued in the names of Bruce Bent and Bruce Bent, II. The '551 Patent was assigned to Island, which is the exclusive assignee of the '551 Patent.

- 144. As set forth above, TD Ameritrade offered one or more products within the scope of the claims of the '551 Patent.
- 145. Since at least June 2015 through at least October 2018, TD Ameritrade made, used, offered for sale and/or sold an enhanced FDIC Insured Deposit Account product that manages funds of a plurality of respective client accounts associated with a plurality of clients participating in the program to offer enhanced FDIC insurance on large deposits.
- 146. TD Ameritrade, individually and collectively, directly and/or indirectly infringed at least Claim 1 of the '551 Patent, literally and/or through the doctrine of equivalents.
- 147. TDAC, TDATC and Scottrade (whose liabilities were assumed by TDHC) directly infringed the '551 Patent by making, using, offering for sale and/or selling FDIC Insured Deposit Account products. *See, e.g.*, 2013 IDA, pp. 5-6 ("[TDAC/TDATC will act as the authorized agent, nominee, custodian and messenger of each [TDAC/TDATC] Customer...in establishing, maintain, making deposits to and withdrawals from, and effecting other transactions in the [TDAC/TDATC] Master Accounts established and maintained by [TDAC/TDATC] in [their] name."; "[TDAC/TDATC] hereby agree[] to act as recordkeeper in maintaining the information set forth in Section 10 with respect to the [TDAC/TDATC] Customer Accounts."); 2016 Amendment, p. 2 ("Ameritrade Parent [TDHC] will cause Scottrade to perform the functions contemplated by Section 1 of the [2013] IDA Agreement with respect to the Scottrade Master Accounts on the same terms and subject to the same conditions as set forth therein.").
- 148. Upon information and belief, with knowledge of the '551 Patent, TDA indirectly infringed the '551 Patent by inducing infringement by others, such as its broker-dealers, including TDAC and TDATC by, for example, encouraging its broker-dealers to sell and/or offer to sell TD Ameritrade's FDIC Insured Deposit Account products and providing the services with respect to

those products for the broker dealers.

- 149. Upon information and belief, with knowledge of the '551 Patent, TDHC indirectly infringed the '551 Patent by inducing Scottrade to sell and/or offer to sell TD Ameritrade's FDIC Insured Deposit Account products and providing the services with respect to those products. 2016 Amendment, p. 2 ("Ameritrade Parent [TDHC] will cause Scottrade to perform the functions contemplated by Section 1 of the [2013] IDA Agreement with respect to the Scottrade Master Accounts on the same terms and subject to the same conditions as set forth therein.").
- Upon information and belief, TD Ameritrade, including TDA and Scottrade, was 150. aware of the '551 Patent prior to the period of infringement through prior business discussions with Double Rock regarding the published U.S. Publication No. 2002-0091637 A1 (which matured into the '551 Patent) and priority patent, the '231 Patent. In addition, the technology disclosed in the '551 Patent was commercially embodied in Liquid Insured Deposits Capital, LLC's "Liquid Insured Deposits" program, the description of which was accompanied by text indicating it was covered **'286 '**551 by the Patent and the Patent. https://web.archive.org/web/20101208183934/http://doublerockcorp.com/lids.shtml.
- 151. TD Ameritrade, including TDAC, TDATC, and Scottrade, directly infringed the '551 Patent based upon at least the following:
- TDAC, TDATC, and Scottrade, made, used, offered for sale and/or sold, "a cash sweep program to enable [clients] to earn interest on cash balances in [the client's] TD Ameritrade account." 2016 Cash Balance Programs Summary. This FDIC Insured Deposit Account program "serve[d] as the primary cash sweep vehicle for earning income on cash balances in TD Ameritrade brokerage accounts and [was] the default cash sweep vehicle…" 2016 Cash Balance Programs Summary.

- 153. As Section 1 of the 2013 IDA makes clear, TDAC and TDATC directly performed infringing acts that are the basis of this Complaint. 2013 IDA, pp. 5-6 ("[TDAC/TDATC will act as the authorized agent, nominee, custodian and messenger of each [TDAC/TDATC] Customer...in establishing, maintain, making deposits to and withdrawals from, and effecting other transactions in the [TDAC/TDATC] Master Accounts established and maintained by [TDAC/TDATC] in [their] name."; "[TDAC/TDATC] hereby agree[] to act as recordkeeper in maintaining the information set forth in Section 10 with respect to the [TDAC/TDATC] Customer Accounts."). As the 2016 Amendment to the 2013 IDA makes clear, Scottrade (the liabilities of which were assumed by TDHC) also directly performed infringing acts that are the basis of this Complaint. 2016 Amendment, p. 2 ("Ameritrade Parent [TDHC] will cause Scottrade to perform the functions contemplated by Section 1 of the [2013] IDA Agreement with respect to the Scottrade Master Accounts on the same terms and subject to the same conditions as set forth therein.").
- 154. As part of its FDIC Insured Deposit Account program, TD Ameritrade practiced a computer-implemented method for managing funds for a plurality of client accounts for a plurality of clients whose funds were accepted for deposit in respective client accounts held in the names of the respective clients at a first banking institution. For example, TD Ameritrade "receive[d] and process[ed] trade orders through a variety of electronic channels, including the Internet [and] mobile trading applications...[which] are heavily dependent on the integrity of the electronic systems supporting them." 2018 Form 10-K, p. 13. Such orders were made through TD Ameritrade's "Online Cash Services", or through the trading applications it developed for mobile devices, including the Android, iPhone, and iPad. *See* 2017 Cash Management Services; *see also* About Us.
 - 155. In the context of managing the FDIC Insured Deposit Accounts, TD Ameritrade,

including TDAC, TDATC, and Scottrade, acted as the authorized agent, nominee, custodian and messenger for each of their respective clients and established and maintained, made deposits to and withdrawals from, and effected other transactions from the respective aggregated deposit accounts (referred to as "Master Accounts") established by TD Ameritrade at its program banks, including TD Bank and TD Bank USA. *See* 2013 IDA, pp. 5-6, 13; 2016 Amendment, p. 2 ("Ameritrade Parent [TDHC] will cause Scottrade to perform the functions contemplated by Section 1 of the [2013] IDA Agreement with respect to the Scottrade Master Accounts on the same terms and subject to the same conditions as set forth therein.").

- a plurality of FDIC-insured and interest-bearing aggregated deposit accounts, with each aggregated deposit account held in a different respective bank of a different respective banking institution including an FDIC-insured and interest-bearing aggregated deposit account held at the first banking institution. For example, as part of its FDIC Insured Deposit Account program, TD Ameritrade maintained a plurality of FDIC-insured and interest-bearing aggregated deposit accounts, held in TD Ameritrade's TD Bank and TD Bank USA, as well as "non-affiliated third-party depository financial institutions." *See* 2018 Form 10-K, p. 48.
- 157. Since as early as 2016, "[t]he Interest Deposit Account serve[d] as the primary cash sweep vehicle for earning [interest] on cash balances." *See* 2016 Cash Balance Programs Summary, p. 1.
- 158. Client accounts were also "eligible for federal deposit insurance by the FDIC for the maximum aggregate amount of principal and interest available with respect to each Customer's aggregate deposits maintained in a single recognized legal capacity." *See* 2013 IDA, p. 5; *see also* 2016 Cash Balance Programs Summary, p. 1 ("In the unlikely event that TD Bank or TD

Bank USA should fail, each depositor with Insured Deposit Account balances is insured, up to the \$250,000 limit.").

- 159. Ameritrade offered enhanced FDIC Insured Deposit Accounts TD through affiliated and third-party banking relationships. See 2018 Form 10-K, p. 6. Specifically, TD Ameritrade "enter[ed] into off-balance sheet arrangements with TD and unaffiliated third-party depository financial institutions (together, the 'Sweep Program Counterparties') to manage its sweep program. The sweep program [was] offered to eligible clients whereby the client's uninvested cash [was] swept into FDIC-insured (up to specific limits) money market deposit accounts at the Sweep Program Counterparties." *Id.*, p. 87.
- 160. As part of its FDIC Insured Deposit Account program, TD Ameritrade maintained an electronic database, on one or more computer-readable media, containing information on funds held by each client in the plurality of aggregated deposit accounts. For example, TD Ameritrade, including TDAC, TDATC and Scottrade, acted as a recordkeeper in maintaining necessary account information, including information on funds held in client brokerage accounts aggregated deposit accounts, electronic database. See 2013 and in an IDA, pp. 5-6, 16 ("[TDAC/TDATC] hereby agrees to act as recordkeeper in maintaining the information set forth in Section 10 with respect to the [TDAC/TDATC] Customer Accounts"; "As agents and custodians for the Customers, each of TDAC and TDATC will maintain, in good faith and in the regular course of business, and in accordance with applicable published requirements of the FDIC ... books and records setting forth the daily balance and accrued interest in the Master Accounts"); 2016 Amendment, p. 2; 2017 Client Agreement, p. 5 ("My account statement will display ... the balance of deposits at each Program Bank [and] any withdrawals made during the month").

- 161. In addition, as part of its FDIC Insured Deposit Account program, TD Ameritrade electronically received client data for deposits and/or transfers to and withdrawals and/or transfers from client accounts through the internet. See 2018 Form 10-K, p. 13 ("We receive and process trade orders through a variety of electronic channels, including the Internet, mobile trading applications and our interactive voice response system. These methods of trading are heavily dependent on the integrity of the electronic systems supporting them."); see also 2017 Cash Management Services ("With Online Cash Services you can quickly and easily...[s]et up free recurring bill payments—and save time with online bill pay...move money between TD Ameritrade accounts...[a]nd [s]ecurely deposit checks"). Thus, in order to perform its role as a recordkeeper, maintain respective client accounts, and prepare client statements, TD Ameritrade, including TDAC, accessed such client account and aggregated deposit account information stored in an electronic database. See 2018 Form 10-K, pp. 8-9 ("TDAC provides the following back office functions: maintaining client accounts;...preparing client...statements;...possession, control and safeguarding of funds...in client accounts;...processing cash sweep transactions to and from bank deposit accounts"); 2017 Cash Management Services.
- administered the aggregated deposit accounts to transfer client funds that had been accepted into respective client accounts held in the names of the respective clients at the first banking institution except that for clients with a balance of funds in the aggregated deposit account at the first banking institution that equal or exceed a specified amount depositing or having deposited additional funds of that client to one of the aggregated deposit accounts in a different one of the banking institutions. For example, TD Ameritrade, including TDAC, TDATC and Scottrade, administered aggregated deposit accounts to transfer funds of its clients that had been accepted into their respective

brokerage accounts to either the aggregated deposit accounts held in TD Ameritrade's TD Bank and TD Bank USA, or aggregated deposit accounts at third-party depository financial institutions. *See* 2013 IDA, pp. 5-6, 14; 2018 Form 10-K, p. 87.

- Accounts, TD Ameritrade, including TDAC, TDATC, and Scottrade, acted as the authorized agent, nominee, custodian and messenger for each of their respective clients and are responsible for making deposits to the aggregated deposit accounts established by TD Ameritrade at its Program Banks, including TD Bank and TD Bank USA. *See* 2013 IDA, pp. 5-6. For example, TDAC allocated client funds into an aggregated deposit account so that "an amount that is less than or equal to each TDAC Customer's FDIC deposit insurance limit [was] deposited in the TDAC Master Account at TD Bank." *See* 2013 IDA, p. 14. TD Ameritrade deposited up to \$247,500 in each Program Bank, per depositor per legal capacity. *See* 2017 Client Agreement.
- 164. If funds of clients in aggregated "Master Accounts" at TD Ameritrade equaled or exceeded the specified amount, TD Ameritrade, including TDAC, TDATC and Scottrade, deposited such additional funds to aggregated deposit accounts at other third-party depository financial institutions. *See* 2013 IDA, p. 14 ("The Depository Institutions recognize that the Ameritrade Companies may enter into agreements in respect of Money Market Deposit Accounts with other depository institutions for...the purpose of providing FDIC insurance to Customer Accounts that exceed the Depository Institutions' FDIC deposit insurance limits"); 2016 Amendment, pp. 2-3.
- 165. As part of its FDIC Insured Deposit Account Program, TD Ameritrade withdrew client funds from the FDIC-insured and interest-bearing aggregated deposit account held at one of the banks of one of the banking institutions more than six (6) times during a month while

preserving an insured an interest-bearing status of the FDIC-insured and interest-bearing aggregated deposit account held at the one bank. For example, in addition to automatically investing or depositing client funds into the Insured Deposit Account chosen as a "Designated Sweep Vehicle," TD Ameritrade automatically withdrew client funds from an aggregated deposit account more than six times during a month to satisfy client obligations, while preserving the insured and interest-bearing status of the aggregated deposit account. *See* 2016 Client Agreement, pp. 4-5. For example, as discussed above, in the context of managing the FDIC Insured Deposit Accounts, TD Ameritrade, including TDAC, TDATC, and Scottrade, acted as the messenger for each of their respective clients and were responsible for determining and making appropriate withdrawals from the respective aggregated deposit accounts. *See* 2013 IDA, pp. 5-6; 2016 Amendment, p. 2.

- 166. Funds were automatically withdrawn from a customer's cash sweep vehicle (*i.e.*, Insured Deposit Account) to satisfy any debits created in the client's brokerage account due to the purchase of securities or withdrawal request. *See* 2016 Cash Balance Programs Summary, p. 1.
- 167. Withdrawals were "made no more than once a day on any Business Day pursuant to instructions delivered by TDAC or TDATC, as applicable If directed by TDAC, TDATC or their respective messenger, as applicable, the Depository Institution will transfer funds to accounts at another depository institution." *See* 2013 IDA, p. 15.
- 168. As part of its FDIC Insured Deposit Account Program, TD Ameritrade updated the electronic database based on the transfers to and withdrawals in the plurality of aggregated deposit accounts. For example, in order to maintain client accounts (*see* 2018 Form 10-K, p. 8-9), TD Ameritrade, including TDAC, TDATC, and Scottrade, updated the electronic database based on

the transfers to and withdrawals from aggregated deposit accounts. *See* 2013 IDA, pp. 5-6; 2016 Amendment, p. 2.

- 169. Acting as the recordkeeper in maintaining client account information, and continuing its role as authorized agent, custodian, and messenger of each respective client, TD Ameritrade, including TDAC and TDAC, would "receive evidence of the Depository Institution's receipt of the withdrawal and transfer instructions for same day funds representing the total of such withdrawals to be made." *See* 2013 IDA, p. 15. Such information was updated in the electronic database and used to provide the offered Online Cash Services. *See* 2017 Cash Management Services; 2016 Client Agreement, p. 5 ("My account statement will reflect the balances, activity, and interest earned with respect to the [Insured Deposit Accounts]."); 2017 Client Agreement, p. 5 (My account statement will display...the balance of deposits of each Program Bank, [and] any withdrawals made during the month.").
- 170. Island satisfied all statutory obligations required to collect pre-filing damages for the full period allowed by law for infringement of the '551 Patent.
- 171. The foregoing direct and indirect infringement of the '551 Patent was deliberate and willful.

SECOND CAUSE OF ACTION: PATENT INFRINGEMENT AGAINST TD AMERITRADE ('821 PATENT)

- 172. Island realleges the prior paragraphs as if fully set forth herein.
- 173. On April 26, 2011, the '821 Patent was duly and legally issued in the names of Bruce Bent and Bruce Bent, II. The '821 Patent was assigned to Island, which is the exclusive assignee of the '821 Patent.
- 174. As set forth above, TD Ameritrade offered one or more products within the scope of the claims of the '821 Patent.

- 175. Since at least June 2015 through at least October 2018, TD Ameritrade made, used, offered for sale and/or sold an enhanced FDIC Insured Deposit Account product that managed funds of a plurality of respective client accounts associated with a plurality of clients participating in the program to offer enhanced FDIC insurance on large deposits.
- 176. TD Ameritrade, individually and collectively, directly and/or indirectly infringed at least Claims 19, 21, 24, and 25 of the '821 Patent, literally and/or through the doctrine of equivalents.
- 177. TDAC, TDATC, and Scottrade (whose liabilities were assumed by TDHC) directly infringed the '821 Patent by making, using, offering for sale and/or selling FDIC Insured Deposit Account products. *See, e.g.*, 2013 IDA, pp. 5-6 ("[TDAC/TDATC will act as the authorized agent, nominee, custodian and messenger of each [TDAC/TDATC] Customer...in establishing, maintain, making deposits to and withdrawals from, and effecting other transactions in the [TDAC/TDATC] Master Accounts established and maintained by [TDAC/TDATC] in [their] name."; "[TDAC/TDATC] hereby agree[] to act as recordkeeper in maintaining the information set forth in Section 10 with respect to the [TDAC/TDATC] Customer Accounts."); 2016 Amendment, p. 2 ("Ameritrade Parent [TDHC] will cause Scottrade to perform the functions contemplated by Section 1 of the [2013] IDA Agreement with respect to the Scottrade Master Accounts on the same terms and subject to the same conditions as set forth therein.").
- 178. Upon information and belief, with knowledge of the technology disclosed in the '821 Patent, TDA indirectly infringed the '821 Patent by inducing infringement by others, such as its broker-dealers, including TDAC and TDATC by, for example, encouraging its broker-dealers to sell and/or offer to sell TD Ameritrade's FDIC Insured Deposit Account products and providing the services with respect to those products for the broker dealers.

- 179. Upon information and belief, with knowledge of the technology disclosed in the '821 Patent, TDHC indirectly infringed the '821 Patent by inducing Scottrade to sell and/or offer to sell TD Ameritrade's FDIC Insured Deposit Account products and providing the services with respect to those products. 2016 Amendment, p. 2 ("Ameritrade Parent [TDHC] will cause Scottrade to perform the functions contemplated by Section 1 of the [2013] IDA Agreement with respect to the Scottrade Master Accounts on the same terms and subject to the same conditions as set forth therein.").
- 180. Upon information and belief, TD Ameritrade, including TDA and Scottrade, was aware of the technology disclosed in the '821 Patent prior to the period of infringement through prior business discussions with Double Rock regarding the published U.S. Publication No. 2002-0091637 A1 (which matured into the '551 Patent) and priority patent, the '231 Patent. In addition, the technology disclosed in the '551 Patent was commercially embodied in Liquid Insured Deposits Capital, LLC's "Liquid Insured Deposits" program, the description of which was accompanied by text indicating it was covered by the '286 Patent and the '551 Patent. https://web.archive.org/web/20101208183934/http://doublerockcorp.com/lids.shtml.
- 181. TD Ameritrade, including TDAC, TDATC, and Scottrade, directly infringed the '821 Patent based upon at least the following:
- 182. Since at least June 2015 through at least October 2018, TD Ameritrade, including TDAC, TDATC, and Scottrade, made, used, offered for sale and/or sold, "a cash sweep program to enable [clients] to earn interest on cash balances in [the client's] TD Ameritrade account." 2016 Cash Balance Programs Summary. This FDIC Insured Deposit Account program "serve[d] as the primary cash sweep vehicle for earning income on cash balances in TD Ameritrade brokerage accounts and [was] the default cash sweep vehicle…" 2016 Cash Balance Programs Summary.

- 183. As Section 1 of the 2013 IDA makes clear, TDAC and TDATC directly performed infringing acts that are the basis of this Complaint. 2013 IDA, pp. 5-6 ("[TDAC/TDATC will act as the authorized agent, nominee, custodian and messenger of each [TDAC/TDATC] Customer...in establishing, maintain, making deposits to and withdrawals from, and effecting other transactions in the [TDAC/TDATC] Master Accounts established and maintained by [TDAC/TDATC] in [their] name."; "[TDAC/TDATC] hereby agree[] to act as recordkeeper in maintaining the information set forth in Section 10 with respect to the [TDAC/TDATC] Customer Accounts."). As the 2016 Amendment to the 2013 IDA makes clear, Scottrade (the liabilities of which were assumed by TDHC) also directly performed infringing acts that are the basis of this Complaint. 2016 Amendment, p. 2 ("Ameritrade Parent [TDHC] will cause Scottrade to perform the functions contemplated by Section 1 of the [2013] IDA Agreement with respect to the Scottrade Master Accounts on the same terms and subject to the same conditions as set forth therein.").
- 184. Thus, as part of its FDIC Insured Deposit Account program, TD Ameritrade practiced a computer-implemented method. For example, TD Ameritrade "receive[d] and process[ed] trade orders through a variety of electronic channels, including the Internet [and] mobile trading applications...[which] are heavily dependent on the integrity of the electronic systems supporting them." 2018 Form 10-K, p. 13. Such orders were made through TD Ameritrade's "Online Cash Services", or through the trading applications it developed for mobile devices, including the Android, iPhone, and iPad. *See* 2017 Cash Management Services; *see also* About Us.
- 185. As part of its FDIC Insured Deposit Account program, TD Ameritrade, including TDAC, TDATC and Scottrade, maintained, or accessed an electronic database, on one or more computer readable media, containing client account information for a plurality of client

accounts for a plurality of clients whose funds had been accepted for deposit in the names of the respective clients at a first banking institution that included a first bank in its infrastructure. For example, TD Ameritrade, including TDAC, TDATC and Scottrade, acted as a recordkeeper in maintaining necessary account information, including information on funds held in client brokerage electronic database. See 2013 accounts. in IDA, pp. 5-6, an 16 ("[TDAC/TDATC] hereby agrees to act as recordkeeper in maintaining the information set forth in Section 10 with respect to the [TDAC/TDATC] Customer Accounts"; "As agents and custodians for the Customers, each of TDAC and TDATC will maintain, in good faith and in the regular course of business, and in accordance with applicable published requirements of the FDIC ... books and records setting forth the daily balance and accrued interest in the Master Accounts"); 2016 Amendment, p. 2 ("Ameritrade Parent [TDHC] will cause Scottrade to perform the functions contemplated by Section 1 of the [2013] IDA Agreement with respect to the Scottrade Master Accounts on the same terms and subject to the same conditions as set forth therein.").; 2017 Client Agreement, p. 5 ("My account statement will display ... the balance of deposits at each Program Bank [and] any withdrawals made during the month").

186. In addition, as part of its FDIC Insured Deposit Account program, TD Ameritrade maintained, or accessed the same or different electronic database, on one or more computer-readable media, containing aggregated deposit account information for a plurality of Federal Deposit Insurance Corporation (FDIC)-insured and interest bearing aggregated deposit accounts, held in a plurality of banks of a plurality of banking institutions and including at least one FDIC-insured and interest-bearing aggregated deposit account held at the first bank in the first banking institution, wherein each aggregated deposit account held funds of a plurality of client accounts, wherein a client account represented funds of a client held in one or more of the aggregated deposit

accounts held by the banks. For example, as part of its FDIC Insured Deposit Account program, TD Ameritrade maintained a plurality of FDIC-insured and interest-bearing aggregated deposit accounts in a plurality of banks, including TD Ameritrade's TD Bank and TD Bank USA, as well as "non-affiliated third-party depository financial institutions." *See* 2018 Form 10-K, p. 48.

- 187. Since as early as 2016, "[t]he Interest Deposit Account serve[d] as the primary cash sweep vehicle for earning [interest] on cash balances." *See* 2016 Cash Balance Programs Summary, p. 1.
- 188. Client accounts were also "eligible for federal deposit insurance by the FDIC for the maximum aggregate amount of principal and interest available with respect to each Customer's aggregate deposits maintained in a single recognized legal capacity." *See* 2013 IDA, p. 5; *see also* 2016 Cash Balance Programs Summary, p. 1 ("In the unlikely event that TD Bank or TD Bank USA should fail, each depositor with Insured Deposit Account balances is insured, up to the \$250,000 limit.").
- 189. TD Ameritrade offered enhanced FDIC Insured Deposit Accounts through affiliated and third-party banking relationships. See 2018 10-Form K, p. 6. Specifically, TD Ameritrade "enter[ed] into off-balance sheet arrangements with TD and unaffiliated third-party depository financial institutions (together, the 'Sweep Program Counterparties') to manage its sweep program. The sweep program [was] offered to eligible clients whereby the client's uninvested cash [was] swept into FDIC-insured (up to specific limits) money market deposit accounts at the Sweep Program Counterparties." Id., p. 87.
- 190. In the context of maintaining the aggregated deposit accounts, TD Ameritrade, including TDAC, TDATC and Scottrade, acted as a recordkeeper in maintaining necessary account information, including information on client funds held aggregated deposit

accounts, in an electronic database. *See* 2013 IDA, pp. 16 ("As agents and custodians for the Customers, each of TDAC and TDATC will maintain, in good faith and in the regular course of business, and in accordance with applicable published requirements of the FDIC ... books and records setting forth the daily balance and accrued interest in the Master Accounts"); 2016 Amendment, p. 2 ("Ameritrade Parent [TDHC] will cause Scottrade to perform the functions contemplated by Section 1 of the [2013] IDA Agreement with respect to the Scottrade Master Accounts on the same terms and subject to the same conditions as set forth therein.").; 2017 Client Agreement, p. 5 ("My account statement will display ... the balance of deposits at each Program Bank [and] any withdrawals made during the month").

- As part of its FDIC Insured Deposit Account program, TD Ameritrade allocated, 191. by one or more computers, for more than one of the client accounts, the client funds from these respective client accounts, among more than one of the aggregated deposit accounts, so that at least a portion of these client funds were maintained in the aggregated deposit account in the first bank and at least a portion of the client funds were maintained in an aggregated deposit account held in at least one of the banks in one of the different banking institutions. For example, TD Ameritrade, including TDAC, TDATC and Scottrade, administered aggregated deposit accounts to transfer funds of its clients that had been accepted into their respective brokerage accounts to either the aggregated deposit accounts held in TD Ameritrade's TD Bank and TD aggregated deposit accounts at third-party depository financial Bank USA. or institutions. See 2013 IDA, pp. 5-6, 14; 2018 Form 10-K, p. 87.
- 192. As part of its FDIC Insured Deposit Account program, TD Ameritrade, including TDAC, TDATC, and Scottrade, acted as the authorized agent, nominee, custodian and messenger for each of their respective clients and are responsible for making deposits to the aggregated

deposit accounts established by TD Ameritrade at its Program Banks, including TD Bank and TD Bank USA. *See* 2013 IDA, pp. 5-6. For example, TDAC allocated client funds into an aggregated deposit account so that "an amount that is less than or equal to each TDAC Customer's FDIC deposit insurance limit [was] deposited in the TDAC Master Account at TD Bank." *See* 2013 IDA, p. 14. TD Ameritrade deposited up to \$247,500 in each Program Bank, per depositor per legal capacity. *See* 2017 Client Agreement.

- 193. If funds of clients in aggregated "Master Accounts" at TD Ameritrade equaled or exceeded the specified amount, TD Ameritrade, including TDAC, TDATC and Scottrade, deposited such additional funds to aggregated deposit accounts at other third-party depository financial institutions. *See* 2013 IDA, p. 14 ("The Depository Institutions recognize that the Ameritrade Companies may enter into agreements in respect of Money Market Deposit Accounts with other depository institutions for...the purpose of providing FDIC insurance to Customer Accounts that exceed the Depository Institutions' FDIC deposit insurance limits"); 2016 Amendment, pp. 2-3.
- 194. As part of its FDIC Insured Deposit Account Program, TD Ameritrade determined, by the one or more computers, client funds to be withdrawn from the FDIC-insured and interest-bearing aggregated deposit account held at one of the banks of one of the banking institutions more than six (6) times during a month while preserving an insured and interest-bearing status of the FDIC-insured and interest-bearing aggregated deposit account held at the one bank. For example, in addition to automatically investing or depositing client funds into the Insured Deposit Account chosen as a "Designated Sweep Vehicle," TD Ameritrade automatically withdrew client funds from an aggregated deposit account more than six times during a month to satisfy client obligations, while preserving the insured and interest-bearing status of the aggregated deposit

account. *See* 2016 Client Agreement, pp. 4-5. For example, in the context of managing the FDIC Insured Deposit Accounts, TD Ameritrade, including TDAC, TDATC, and Scottrade, acted as the messenger for each of their respective clients and were responsible for determining and making appropriate withdrawals from the respective aggregated deposit accounts. *See* 2013 IDA, pp. 5-6; 2016 Amendment, p. 2.

- 195. Funds were automatically withdrawn from a customer's cash sweep vehicle (*i.e.*, Insured Deposit Account) to satisfy any debits created in the client's brokerage account due to the purchase of securities or withdrawal request. *See* 2016 Cash Balance Programs Summary, p. 1.
- 196. Withdrawals were "made no more than once a day on any Business Day pursuant to instructions delivered by TDAC or TDATC, as applicable If directed by TDAC, TDATC or their respective messenger, as applicable, the Depository Institution will transfer funds to accounts at another depository institution." *See* 2013 IDA, p. 15.
- 197. As part of its FDIC Insured Deposit Account Program, TD Ameritrade updated, by one or more computers, the electronic database based on the allocation of client funds to or from the plurality of aggregated deposit accounts. For example, in order to maintain client accounts (see 2018 Form 10-K, p. 8-9), TD Ameritrade, including TDAC, TDATC, and Scottrade, updated the electronic database based on the transfers to and withdrawals from aggregated deposit accounts. See 2013 IDA, pp. 5-6; 2016 Amendment, p. 2.
- 198. Acting as the recordkeeper in maintaining client account information, and continuing its role as authorized agent, custodian, and messenger of each respective client, TD Ameritrade, including TDAC and TDAC, would "receive evidence of the Depository Institution's receipt of the withdrawal and transfer instructions for same day funds representing the total of such

withdrawals to be made." See 2013 IDA, p. 15. Such information was updated in the electronic database and used to provide the offered Online Cash Services. See 2017 Cash Management Services; 2016 Client Agreement, p. 5 ("My account statement will reflect the balances, activity, and interest earned with respect to the [Insured Deposit Accounts]."); 2017 Client Agreement, p. 5 (My account statement will display...the balance of deposits of each Program Bank, [and] any withdrawals made during the month.").

- 199. Island satisfied all statutory obligations required to collect pre-filing damages for the full period allowed by law for infringement of the '821 Patent.
- 200. The foregoing direct and indirect infringement of the '821 Patent was deliberate and willful.

THIRD CAUSE OF ACTION: PATENT INFRINGEMENT AGAINST TD AMERITRADE ('916 PATENT)

- 201. Island realleges the prior paragraphs as if fully set forth herein.
- 202. On November 13, 2012, the '916 Patent was duly and legally issued in the names of Bruce Bent and Bruce Bent, II. The '916 Patent was assigned to Island, which is the exclusive assignee of the '916 Patent.
- 203. As set forth above, TD Ameritrade offered one or more products within the scope of the claims of the '916 Patent.
- 204. Since at least June 2015 through at least October 21, 2018, TD Ameritrade made, used, offered for sale and/or sold an enhanced FDIC Insured Deposit Account product that managed funds of a plurality of respective client accounts associated with a plurality of clients participating in the program to offer enhanced FDIC insurance on large deposits.
- 205. TD Ameritrade, individually and collectively, directly and/or indirectly infringed at least Claim 1 of the '916 Patent, literally and/or through the doctrine of equivalents.

- 206. TDAC, TDATC, and Scottrade (whose liabilities were assumed by TDHC) directly infringed the '916 Patent by making, using, offering for sale and/or selling FDIC Insured Deposit Account products. *See, e.g.*, 2013 IDA, pp. 5-6 ("[TDAC/TDATC will act as the authorized agent, nominee, custodian and messenger of each [TDAC/TDATC] Customer...in establishing, maintain, making deposits to and withdrawals from, and effecting other transactions in the [TDAC/TDATC] Master Accounts established and maintained by [TDAC/TDATC] in [their] name."; "[TDAC/TDATC] hereby agree[] to act as recordkeeper in maintaining the information set forth in Section 10 with respect to the [TDAC/TDATC] Customer Accounts."); 2016 Amendment, p. 2 ("Ameritrade Parent [TDHC] will cause Scottrade to perform the functions contemplated by Section 1 of the [2013] IDA Agreement with respect to the Scottrade Master Accounts on the same terms and subject to the same conditions as set forth therein.").
- 207. Upon information and belief, with knowledge of the technology disclosed in the '916 Patent, TDA indirectly infringed the '916 Patent by inducing infringement by others, such as its broker-dealers, including TDAC and TDATC by, for example, encouraging its broker-dealers to sell and/or offer to sell TD Ameritrade's FDIC Insured Deposit Account products and providing the services with respect to those products for the broker dealers.
- 208. Upon information and belief, with knowledge of the technology disclosed in the '916 Patent, TDHC indirectly infringed the '916 Patent by inducing Scottrade to sell and/or offer to sell TD Ameritrade's FDIC Insured Deposit Account products and providing the services with respect to those products. 2016 Amendment, p. 2 ("Ameritrade Parent [TDHC] will cause Scottrade to perform the functions contemplated by Section 1 of the [2013] IDA Agreement with respect to the Scottrade Master Accounts on the same terms and subject to the same conditions as set forth therein.").

- 209. Upon information and belief, TD Ameritrade, including TDA and Scottrade, was aware of the technology disclosed in the '916 Patent prior to the period of infringement through prior business discussions with Double Rock regarding the published U.S. Publication No. 2002-0091637 A1 (which matured into the '551 Patent) and priority patent, the '231 Patent. In addition, the technology disclosed in the '551 Patent was commercially embodied in Liquid Insured Deposits Capital, LLC's "Liquid Insured Deposits" program, the description of which was accompanied by text indicating it was covered by the '286 Patent and the '551 Patent. https://web.archive.org/web/20101208183934/http://doublerockcorp.com/lids.shtml.
- 210. TD Ameritrade, including TDAC, TDATC, and Scottrade, directly infringed the '916 Patent based upon at least the following:
- 211. Since at least June 2015 through at least October 2018, TD Ameritrade, including TDAC, TDATC, and Scottrade, made, used, offered for sale and/or sold, "a cash sweep program to enable [clients] to earn interest on cash balances in [the client's] TD Ameritrade account." 2016 Cash Balance Programs Summary. This FDIC Insured Deposit Account program "serve[d] as the primary cash sweep vehicle for earning income on cash balances in TD Ameritrade brokerage accounts and [was] the default cash sweep vehicle…" 2016 Cash Balance Programs Summary.
- 212. As Section 1 of the 2013 IDA makes clear, TDAC and TDATC directly performed infringing acts that are the basis of this Complaint. 2013 IDA, pp. 5-6 ("[TDAC/TDATC will act as the authorized agent, nominee, custodian and messenger of each [TDAC/TDATC] Customer...in establishing, maintain, making deposits to and withdrawals from, and effecting other transactions in the [TDAC/TDATC] Master Accounts established and maintained by [TDAC/TDATC] in [their] name."; "[TDAC/TDATC] hereby agree[] to act as recordkeeper in maintaining the information set forth in Section 10 with respect to the [TDAC/TDATC] Customer

Accounts."). In addition, as the 2016 Amendment to the 2013 IDA makes clear, Scottrade (the liabilities of which were assumed by TDHC) directly performed infringing acts that are the basis of this Complaint. 2016 Amendment, p. 2 ("Ameritrade Parent [TDHC] will cause Scottrade to perform the functions contemplated by Section 1 of the [2013] IDA Agreement with respect to the Scottrade Master Accounts on the same terms and subject to the same conditions as set forth therein.").

Thus, as part of its FDIC Insured Deposit Account program, TD Ameritrade 213. practiced a method, including accessing, using one or more computers, one or more electronic databases, stored on one or more computer-readable media, the one or more databases comprising: (1) aggregated account information for a plurality of government backed-insured and interestbearing aggregated deposit accounts held in a plurality of financial institutions participating in a program including a first depository institution in infrastructure of a first financial institution of the plurality of the financial institutions and a second depository institution in infrastructure of a different financial institution of the plurality of financial institutions, wherein funds from client accounts of a plurality of clients are aggregated with funds of other client accounts in the aggregated deposit accounts held in the financial institutions, with the aggregated deposit accounts providing non-penalized liquidity for the funds held therein; and (2) client account information for funds, for each of a plurality of respective client accounts, held in one or more of the plurality of the financial institutions, with funds accepted for deposit for respective ones of the client accounts in the names of the respective clients at the first financial institution, with the client account information comprising a respective balance of funds, from the respective client account, held in each of one or more of the aggregated deposit accounts holding funds of the respective client accounts. For example, as part of its FDIC Insured Deposit Account program, TD Ameritrade,

including TDAC, TDATC and Scottrade, maintained a plurality of FDIC-insured and interest-bearing aggregated deposit accounts in a plurality of banks, including TD Ameritrade's TD Bank and TD Bank USA, as well as "non-affiliated third-party depository financial institutions." *See* 2018 Form 10-K, p. 48.

- 214. Since as early as 2016, "[t]he Interest Deposit Account serve[d] as the primary cash sweep vehicle for earning [interest] on cash balances." *See* 2016 Cash Balance Programs Summary, p. 1.
- 215. Client accounts were also "eligible for federal deposit insurance by the FDIC for the maximum aggregate amount of principal and interest available with respect to each Customer's aggregate deposits maintained in a single recognized legal capacity." *See* 2013 IDA, p. 5; *see also* 2016 Cash Balance Programs Summary, p. 1 ("In the unlikely event that TD Bank or TD Bank USA should fail, each depositor with Insured Deposit Account balances is insured, up to the \$250,000 limit.").
- 216. TD Ameritrade offered enhanced FDIC Insured Deposit Accounts through affiliated and third-party banking relationships. See 2018 10-Form K, p. 6. Specifically, TD Ameritrade "enter[ed] into off-balance sheet arrangements with TD and unaffiliated third-party depository financial institutions (together, the 'Sweep Program Counterparties') to manage its sweep program. The sweep program [was] offered to eligible clients whereby the client's uninvested cash [was] swept into FDIC-insured (up to specific limits) money market deposit accounts at the Sweep Program Counterparties." Id., p. 87.
- 217. In the context of maintaining the aggregated deposit accounts, TD Ameritrade, including TDAC, TDATC and Scottrade, acted as a recordkeeper in maintaining necessary account information, including information on client funds held aggregated deposit

accounts, in an electronic database. *See* 2013 IDA, pp. 16 ("As agents and custodians for the Customers, each of TDAC and TDATC will maintain, in good faith and in the regular course of business, and in accordance with applicable published requirements of the FDIC ... books and records setting forth the daily balance and accrued interest in the Master Accounts"); 2016 Amendment, p. 2 ("Ameritrade Parent [TDHC] will cause Scottrade to perform the functions contemplated by Section 1 of the [2013] IDA Agreement with respect to the Scottrade Master Accounts on the same terms and subject to the same conditions as set forth therein.").; 2017 Client Agreement, p. 5 ("My account statement will display ... the balance of deposits at each Program Bank [and] any withdrawals made during the month").

In addition, TD Ameritrade, including TDAC, TDATC and Scottrade, acted as a 218. recordkeeper in maintaining necessary account information, including information on funds held in client brokerage accounts, in electronic database. See 2013 IDA, pp. 5-6, an 16 ("[TDAC/TDATC] hereby agrees to act as recordkeeper in maintaining the information set forth in Section 10 with respect to the [TDAC/TDATC] Customer Accounts"; "As agents and custodians for the Customers, each of TDAC and TDATC will maintain, in good faith and in the regular course of business, and in accordance with applicable published requirements of the FDIC ... books and records setting forth the daily balance and accrued interest in the Master Accounts"); 2016 Amendment, p. 2 ("Ameritrade Parent [TDHC] will cause Scottrade to perform the functions contemplated by Section 1 of the [2013] IDA Agreement with respect to the Scottrade Master Accounts on the same terms and subject to the same conditions as set forth therein.").; 2017 Client Agreement, p. 5 ("My account statement will display ... the balance of deposits at each Program Bank [and] any withdrawals made during the month").

219. As part of its FDIC Insured Deposit Account program, TD Ameritrade allocated,

using one or more computers, for multiple of the client accounts, the client funds of these respective client accounts among more than one of the aggregated deposit accounts, so that at least a portion of these client funds were maintained in the aggregated deposit account in the first depository institution and at least a portion of the client funds were maintained in the aggregated deposit account held in the second depository institution in the different financial institution. For example, TD Ameritrade, including TDAC, TDATC and Scottrade, administered aggregated deposit accounts to transfer funds of its clients that had been accepted into their respective brokerage accounts to either the aggregated deposit accounts held in TD Ameritrade's TD Bank and TD Bank USA, or aggregated deposit accounts at third-party depository financial institutions. *See* 2013 IDA, pp. 5-6, 14; 2018 Form 10-K, p. 87.

- 220. As part of its FDIC Insured Deposit Account program, TD Ameritrade, including TDAC, TDATC, and Scottrade, acted as the authorized agent, nominee, custodian and messenger for each of their respective clients and are responsible for making deposits to the aggregated deposit accounts established by TD Ameritrade at its Program Banks, including TD Bank and TD Bank USA. *See* 2013 IDA, pp. 5-6. For example, TDAC allocated client funds into an aggregated deposit account so that "an amount that is less than or equal to each TDAC Customer's FDIC deposit insurance limit [was] deposited in the TDAC Master Account at TD Bank." *See* 2013 IDA, p. 14. TD Ameritrade deposited up to \$247,500 in each Program Bank, per depositor per legal capacity. *See* 2017 Client Agreement.
- 221. If funds of clients in aggregated "Master Accounts" at TD Ameritrade equaled or exceeded the specified amount, TD Ameritrade, including TDAC, TDATC and Scottrade, deposited such additional funds to aggregated deposit accounts at other third-party depository financial institutions. *See* 2013 IDA, p. 14 ("The Depository Institutions recognize that the

Ameritrade Companies may enter into agreements in respect of Money Market Deposit Accounts with other depository institutions for...the purpose of providing FDIC insurance to Customer Accounts that exceed the Depository Institutions' FDIC deposit insurance limits"); 2016 Amendment, pp. 2-3.

- 222. As part of its FDIC Insured Deposit Account Program, TD Ameritrade determined, using the one or more computers, client funds to be withdrawn from the aggregated deposit account held at one of the depository institutions of one of the financial institutions more than six (6) times during a month while preserving an insured and interest-bearing status of the aggregated deposit account held at the one depository institution.
- In addition, as part of its FDIC Insured Deposit Account Program, TD Ameritrade generated one or more instructions to transfer funds to or from one or more of the respective aggregated deposit accounts in the respective depository institutions in the program through an aggregated demand deposit account based at least in part on the respective allocations determined for the respective depository institutions in the program, wherein the one or more instructions comprise making a withdrawal and/or transfer from the one aggregated deposit account more than six (6) times during the month period to correspond at least with the more than six (6) of the allocations determined over the month period that are withdrawals, while maintaining an insured and interest-bearing status of the aggregated deposit account held at the one depository institution. For example, in addition to automatically investing or depositing client funds into the Insured **Deposit** Account chosen as a "Designated Sweep Vehicle," TD Ameritrade automatically withdrew client funds from an aggregated deposit account more than six times during a month to satisfy client obligations, while preserving the insured and interestbearing status of the aggregated deposit account. See 2016 Client Agreement, pp. 4-5. For

example, in the context of managing the FDIC Insured Deposit Accounts, TD Ameritrade, including TDAC, TDATC, and Scottrade, acted as the messenger for each of their respective clients and were responsible for determining and making appropriate withdrawals from the respective aggregated deposit accounts. *See* 2013 IDA, pp. 5-6; 2016 Amendment, p. 2.

- 224. Funds were automatically withdrawn from a customer's cash sweep vehicle (*i.e.*, Insured Deposit Account) to satisfy any debits created in the client's brokerage account due to the purchase of securities or withdrawal request. *See* 2016 Cash Balance Programs Summary, p. 1.
- 225. Withdrawals were "made no more than once a day on any Business Day pursuant to instructions delivered by TDAC or TDATC, as applicable If directed by TDAC, TDATC or their respective messenger, as applicable, the Depository Institution will transfer funds to accounts at another depository institution." *See* 2013 IDA, p. 15.
- 226. As part of its FDIC Insured Deposit Account Program, TD Ameritrade updated, using the one or more computers, the one or more electronic databases based at least in part on the allocation of client funds to or from the plurality of aggregated deposit accounts. For example, in order to maintain client accounts (*see* 2018 Form 10-K, p. 8-9), TD Ameritrade, including TDAC, TDATC, and Scottrade, updated the electronic database based on the transfers to and withdrawals from aggregated deposit accounts. *See* 2013 IDA, pp. 5-6; 2016 Amendment, p. 2.
- 227. Acting as the recordkeeper in maintaining client account information, and continuing its role as authorized agent, custodian, and messenger of each respective client, TD Ameritrade, including TDAC and TDAC, would "receive evidence of the Depository Institution's receipt of the withdrawal and transfer instructions for same day funds representing the total of such withdrawals to be made." *See* 2013 IDA, p. 15. Such information was updated in the electronic

database and used to provide the offered Online Cash Services. *See* 2017 Cash Management Services; 2016 Client Agreement, p. 5 ("My account statement will reflect the balances, activity, and interest earned with respect to the [Insured Deposit Accounts]."); 2017 Client Agreement, p. 5 (My account statement will display...the balance of deposits of each Program Bank, [and] any withdrawals made during the month.").

- 228. Island satisfied all statutory obligations required to collect pre-filing damages for the full period allowed by law for infringement of the '916 Patent.
- 229. The foregoing direct and indirect infringement of the '916 Patent was deliberate and willful.

FOURTH CAUSE OF ACTION: PATENT INFRINGEMENT AGAINST TD AMERITRADE ('286 PATENT)

- 230. Island realleges the prior paragraphs as if fully set forth herein.
- 231. On March 24, 2009, the '286 Patent was duly and legally issued in the names of Bruce Bent and Bruce Bent, II. The '286 Patent was assigned to Island, which is the exclusive assignee of the '286 Patent.
- 232. As set forth above, TD Ameritrade offered one or more products within the scope of the claims of the '286 Patent.
- 233. Since at least October 2018 through at least March 2020, TD Ameritrade made, used, offered for sale and/or sold an enhanced FDIC Insured Deposit Account product that managed funds of a plurality of respective client accounts associated with a plurality of clients participating in the program to offer enhanced FDIC insurance on large deposits.
- 234. TD Ameritrade, individually and collectively, directly and/or indirectly infringed at least Claim 1 of the '286 Patent, literally and/or through the doctrine of equivalents.
 - 235. TDAC and TDATC directly infringed the '286 Patent by making, using, offering

for sale and/or selling FDIC Insured Deposit Account products. *See, e.g.*, 2013 IDA, pp. 5-6 ("[TDAC/TDATC will act as the authorized agent, nominee, custodian and messenger of each [TDAC/TDATC] Customer...in establishing, maintain, making deposits to and withdrawals from, and effecting other transactions in the [TDAC/TDATC] Master Accounts established and maintained by [TDAC/TDATC] in [their] name."; "[TDAC/TDATC] hereby agree[] to act as recordkeeper in maintaining the information set forth in Section 10 with respect to the [TDAC/TDATC] Customer Accounts.").

- 236. Upon information and belief, with knowledge of the technology disclosed in 286 Patent, TDA indirectly infringed the '286 Patent by inducing infringement by others, such as its broker-dealers, including TDAC and TDATC by, for example, encouraging its broker-dealers to sell and/or offer to sell TD Ameritrade's FDIC Insured Deposit Account products and providing the services with respect to those products for the broker dealers.
- 237. Upon information and belief, with knowledge of the technology disclosed in the '286 Patent, Schwab indirectly infringed the '286 Patent by inducing infringement by others, such as its broker-dealers, including TDAC and TDATC by, for example, encouraging its broker-dealers to sell and/or offer to sell TD Ameritrade's FDIC Insured Deposit Account products and providing the services with respect to those products for the broker dealers. 2019 Amendment, p. 2 ("Schwab will cause (i) its subsidies that are broker-dealers as of the Closing, including Charles Schwab & Co., Inc. and the TDA Broker-Dealers [TDAC and TDATC]...to make available to their Customers the sweep program contemplated by this Agreement to the extend necessary for Schwab to satisfy its obligations hereunder and will cause the Broker-Dealers to take all other actions required of them pursuant to this Agreement.").
 - 238. Upon information and belief, TD Ameritrade was aware of the technology

disclosed in the '286 Patent prior to the period of infringement through prior business discussions with Double Rock regarding its FDIC-insured sweep solutions and tiered insured deposits strategy, disclosed in the '231 Patent and the then pending application that matured into the '286 Patent. In addition, the technology disclosed in the '286 Patent was commercially embodied in Liquid Insured Deposits Capital, LLC's "Liquid Insured Deposits" program, the description of which was accompanied by text indicating it was covered by the '286 Patent and the '551 Patent. https://web.archive.org/web/20101208183934/http://doublerockcorp.com/lids.shtml.

- 239. TD Ameritrade, including TDAC, TDATC, and Scottrade, directly infringed the '286 Patent based upon at least the following:
- 240. From at least October 5, 2018 through at least March 17, 2020, TD Ameritrade, including TDAC and TDATC, made, used, offered for sale and/or sold "a cash sweep program to enable [clients] to earn interest on cash balances in [the clients'] TD Ameritrade account." See 2020 Cash Sweep Program Summary; see also 2019 Amendment, p. 2 ("Schwab will cause...its subsidiaries that are broker-dealers as of the Closing, including Charles Schwab & Co., Inc. and the TDA Broker Dealers...to make available to their Customers the sweep program contemplated by this Agreement to the extent for Schwab to satisfy its obligations hereunder and will cause the Broker Dealers to take all other actions required of them pursuant to this Agreement.").
- 241. As Section 1 of the 2013 IDA makes clear, TDAC and TDATC directly performed infringing acts that are the basis of this Complaint. 2013 IDA, pp. 5-6 ("[TDAC/TDATC will act as the authorized agent, nominee, custodian and messenger of each [TDAC/TDATC] Customer...in establishing, maintain, making deposits to and withdrawals from, and effecting other transactions in the [TDAC/TDATC] Master Accounts established and maintained by

[TDAC/TDATC] in [their] name."; "[TDAC/TDATC] hereby agree[] to act as recordkeeper in maintaining the information set forth in Section 10 with respect to the [TDAC/TDATC] Customer Accounts.").

- 242. TD Ameritrade's "FDIC Insured Deposit Account" "serve[d] as the primary cash sweep vehicle for earning income on cash balances in TD Ameritrade brokerage accounts and is the default cash sweep vehicle..." See 2020 Cash Sweep Program Summary.
- 243. Thus, TD Ameritrade practiced, as part of its FDIC Insured Deposit Account program during this period, a method for managing funds of a plurality of respective client accounts associated with a plurality of respective clients participating in a program.
- 244. As part of its FDIC Insured Deposit Account program, TD Ameritrade maintained a plurality of FDIC-insured and interest-bearing aggregated deposit accounts, in which each of the aggregated deposit accounts were interest-bearing, with one or more of the aggregated deposit accounts held in each different one of a plurality of financial institutions in the program. For example, in the context of managing the FDIC Insured Deposit Accounts, TD Ameritrade, including TDAC and TDATC, acted as the authorized agent, nominee, custodian and messenger for each of their respective clients and established and maintained, made deposits to and withdrawals from, and effected other transactions from the respective aggregated deposit accounts established by TD Ameritrade at its program banks, including TD Bank and TD Bank USA. See 2019 Amendment, p. 2; 2013 IDA, pp. 5-6, 13.
- 245. As part of its FDIC Insured Deposit Account program, TD Ameritrade maintained funds of a plurality of clients in the plurality of aggregated deposit accounts so that each aggregated deposit account held funds of a plurality of the clients, with each client account in a subset of the plurality of client accounts having funds in their respective client account over a

predetermined amount, with each of the respective client accounts in the subset having funds deposited in a plurality of the aggregated deposit accounts. For example, TD Ameritrade was responsible for "maintaining, making deposits to and withdrawals from, and effecting other transactions in the Master Accounts" at the respective depository institution. See 2019 Amendment, p. 2; 2013 IDA, pp. 5-6.

- 246. "The sweep program [was] offered to eligible clients whereby the client's uninvested cash is swept into FDIC-insured (up to specific limits) money market deposit accounts at the Sweep Program Counterparties." See 2019 Form 10-K, p. 87; March 31, 2020 Form 10-Q, p. 22. Client funds deposited into the provided aggregated deposit accounts earned interest in accordance with the rate or tiered rates available to the respective client as determined by TD Ameritrade, regardless of which Program Bank held the funds. See 2020 Cash Sweep Program Summary, p. 1.
- 247. "The bank sweep program [was] designed to provide [clients] with access to at least two Program Banks." See 2020 Cash Sweep Program Summary, p. 2. As part of the FDIC Insured Deposit Account program, TD Ameritrade "deposit[ed] up to \$247,500 in each Program Bank, per depositor per legal capacity, except for 'the Excess Bank,' which [received] deposits without limit, even if the amount in the IDA exceed[ed] the FDIC insurance available to [the client]." Id., p. 1. TD Ameritrade maintained each client's balance of deposits at each Program Bank. See 2019 Client Agreement, p. 6 ("My account statement will display the name of each Program Bank with which I have deposits [and] the balance of deposits at each Program Bank.").
- 248. As part of its FDIC Insured Deposit Account program, TD Ameritrade maintained, or accessed by computer an electronic database, on one or more computer readable media, that

comprised a respective balance of funds for each of a plurality of the respective client accounts in the subset and information on funds held by each of the plurality of clients of the subset in the plurality of aggregated deposit accounts. For example, acting as a recordkeeper, TD Ameritrade, including TDAC and TDATC, maintained information with respect to client accounts and each aggregated deposit account. See 2019 Amendment, pp. 2, 10; 2013 IDA, pp. 5-6, 16; *see also* 2019 Client Agreement, p. 6 ("My account statement will display...the balance of deposits at each Program Bank [and] any withdrawals made during the month"); 2020 Client Agreement, p. 6.

- 249. "As agent and custodian for the Customers, [TD Ameritrade, including TDAC and TDATC,] [maintained], in good faith and in the regular course of business, and in accordance with applicable published requirements of the FDIC (including, without limitation, FDIC requirements for pass-through deposit insurance coverage), books and records setting forth the daily balance and accrued interest in the Customer Accounts." See 2019 Amendment, p. 10; 2013 IDA, p. 16 ("As agents and custodians for the Customers [TD Ameritrade, including TDAC and TDATC,] [maintained], in good faith and in the regular course of business, and in accordance with applicable published requirements of the FDIC (including, without limitation, FDIC requirements for pass-through deposit insurance coverage), books and records setting forth the daily balance and accrued interest in the Master Accounts at the Depository Institutions").
- 250. As part of its FDIC Insured Deposit Account program, TD Ameritrade received electronic client transaction data describing debit and/or credit transactions made by a plurality of clients against their respective client accounts. For example, TD Ameritrade, including TDAC and TDATC, offered Online Cash Services, where clients were able to pay bills, make purchases, move funds, and were provided with a debit card. See Cash Management Services ("With Online Cash Services, you can quickly and easily: Set up free recurring bill

payments - and save time with online bill pay; enjoy added convenience with Apple Pay on your Visa® debit card issued by TD Bank USA, N.A., [and] easily move money between TD Ameritrade accounts"); 2018 Form 10-K, p. 13 ("We receive and process trade orders through a variety of electronic channels, including the Internet, mobile trading applications and our interactive voice response system. These methods of trading are heavily dependent on the integrity of the electronic systems supporting them."). Such orders were made through TD Ameritrade's "Online Cash Services" (see TD Ameritrade Cash Management Services), or through the trading applications it has developed for mobile devices, including the Android, iPhone, and iPad. See Cash Management Services; 2017 Cash Management Services; see also 2018 Form 10-K, p. 13; "About Us."

- 251. Thus, since TD Ameritrade was responsible for making deposits to and withdrawals from, and effecting other transactions in aggregated deposit accounts, in order to, for example, withdraw funds from a client's cash sweep vehicle in response to a withdrawal request or to satisfy any debits created in a client brokerage account, TD Ameritrade electronically received client transaction data. See 2019 Amendment, p. 2; 2013 IDA, pp. 5-6; 2020 Cash Sweep Program Summary, p. 1.
- 252. Withdrawals from the aggregated "Master Account" were only made "pursuant to instructions delivered" to depository institutions by TD Ameritrade. *See* 2019 Amendment, p. 9; 2013 IDA, p. 15. TD Ameritrade would then "receive evidence of the Depository Institution's receipt of the withdrawal and transfer instructions for same day funds representing the total of such withdrawals to be made to such Broker-Dealer as agent for its Customers." *See* 2019 Amendment, p. 9; 2013 IDA, p. 15.
 - 253. As part of its FDIC Insured Deposit Account program, TD Ameritrade updated the

respective balance of funds in the database associate with each of the respective client accounts in the subset based on one or more debit and/or credit transactions made by the respective client. For example, TD Ameritrade, including TDAC and TDATC, acting as recordkeeper, recorded and updated such transactions in order to accurately provide clients with its Online Cash Services. See 2019 Amendment, pp. 2, 10; 2013 IDA, pp. 5-6, 16; see also 2019 Client Agreement, p. 6 ("My account statement will display...the balance of deposits at each Program Bank [and] any withdrawals made during the month"); 2020 Client Agreement, p. 6.

- 254. As part of its FDIC Insured Deposit Account program, TD Ameritrade determined electronically for each of the plurality of the client accounts in the subset of client accounts a respective interest rate from among a plurality of interest rates in an interest-allocation procedure based at least in part on the updated balance of funds associated with the respective client account in the subset. For example, TD Ameritrade offered clients interest on deposits in the FDIC-insured deposit accounts "in accordance with the rates or tiered rates available to [the client] as determined by TD Ameritrade." 2020 Cash Sweep Program, p. 1.
- 255. Such rates varied based on the particular offering or level of assets held by clients with TD Ameritrade. See 2020 Cash Sweep Program, p. 1. "TD Ameritrade use[d] the daily balance method to calculate interest on [a client's] Account." Id. For example, TD Ameritrade provided its clients the following tiered interest rates based on the dollar range of assets held with TD Ameritrade on behalf of its clients, at various points from 2018 to 2020. *See* https://web.archive.org/web/20181010140345/https://www.tdameritrade.com/pricing/margin-and-interest-rates.page;

https://web.archive.org/web/20190322024015/https://www.tdameritrade.com/pricing/margin-and-interest-rates.page;

https://web.archive.org/web/20191011184328/https://www.tdameritrade.com/pricing/margin-and-interest-rates.page;

https://web.archive.org/web/20200303142412/https://www.tdameritrade.com/pricing/margin-and-interest-rates.page;

https://web.archive.org/web/20190729204735/https://www.tdameritrade.com/pricing/margin-and-interest-rates.page

- 256. As part of its FDIC Insured Deposit Account program, TD Ameritrade calculated electronically a respective interest for a period to be posted to each of a plurality of respective client accounts in the subset with the respective interest to be posted to a respective client account determined based on the respective interest rate determined for that respective client account in the subset, with the calculating being independent from the respective client account pro rata share in earnings posted to the plurality of the aggregated deposit accounts holding funds of the respective client accounts. For example, rather than apply the same interest rate on all funds held in an aggregated deposit account and distribute the earnings on a pro rata basis, "[t]he interest rate to be paid on funds in the Customer Accounts [varied] depending on the value of the Customer's assets including funds on deposit in such Customer's Customer Accounts." See 2019 Amendment, p. 4; 2013 IDA, pp. 7-8.
- 257. As part of its FDIC Insured Deposit Account program, TD Ameritrade determine the interest earned during the period by each of the plurality of aggregated deposit accounts in the program, and posted electronically the respective interest calculated for each of the plurality of respective client accounts based on the respective interest rate determined for the respective client account. For example, TD Ameritrade used the applicable tiered rate and "the daily balance method to calculate" interest for a client for a given period. See 2020 Cash Sweep Program

- Summary, p. 1. "Interest [was] accrue[d] on balances from the day they [were] deposited into the IDAs through the business day preceding the date of withdrawal from the IDA. Interest [was] accrue[d] daily and credited on the last business day of each month." Id.
- 258. The calculated respective interest was then posted to respective client accounts. See, e.g., 2019 Client Agreement, p. 6 ("My account statement will display...the applicable interest rate and amount of interest earned on my deposits."); 2020 Client Agreement, p. 6; 2013 IDA, p. 16; 2019 Amendment, p. 10 ("As agent and custodian for the Customers, [TD Ameritrade, including TDAC and TDATC,] [maintained], in good faith and in the regular course of business, and in accordance with applicable published requirements of the FDIC (including, without limitation, FDIC requirements for pass-through deposit insurance coverage), books and records setting forth the daily balance and accrued interest in the Customer Accounts.").
- 259. Island satisfied all statutory obligations required to collect pre-filing damages for the full period allowed by law for infringement of the '286 Patent.
- 260. The foregoing direct and indirect infringement of the '286 Patent was deliberate and willful.

FIFTH CAUSE OF ACTION: PATENT INFRINGEMENT AGAINST TD AMERITRADE ('734 PATENT)

- 261. Island realleges the prior paragraphs as if fully set forth herein.
- 262. On March 16, 2010, the '734 Patent was duly and legally issued in the names of Bruce Bent and Bruce Bent, II. The '734 Patent was assigned to Island, which is the exclusive assignee of the '734 Patent.
- 263. As set forth above, TD Ameritrade offered one or more products within the scope of the claims of the '734 Patent.

- 264. Since at least June 2015 through at least March 2021, TD Ameritrade made, used, offered for sale and/or sold and enhanced FDIC Insured Deposit Account product that manages funds of a plurality of respective client accounts associated with a plurality of clients participating in the program to offer enhanced FDIC insurance on large deposits.
- 265. TD Ameritrade, individually and collectively, directly and/or indirectly infringed at least Claims 1, 5, 8, 12, 15, and 16 of the '734 Patent, literally and/or through the doctrine of equivalents.
- 266. TDAC, TDATC, and Scottrade (whose liabilities were assumed by TDHC) directly infringed the '734 Patent by making, using, offering for sale and/or selling FDIC Insured Deposit Account products. *See, e.g.*, 2013 IDA, pp. 5-6 ("[TDAC/TDATC will act as the authorized agent, nominee, custodian and messenger of each [TDAC/TDATC] Customer...in establishing, maintain, making deposits to and withdrawals from, and effecting other transactions in the [TDAC/TDATC] Master Accounts established and maintained by [TDAC/TDATC] in [their] name."; "[TDAC/TDATC] hereby agree[] to act as recordkeeper in maintaining the information set forth in Section 10 with respect to the [TDAC/TDATC] Customer Accounts."); 2016 Amendment, p. 2 ("Ameritrade Parent [TDHC] will cause Scottrade to perform the functions contemplated by Section 1 of the [2013] IDA Agreement with respect to the Scottrade Master Accounts on the same terms and subject to the same conditions as set forth therein.").
- 267. Upon information and belief, with knowledge of the technology disclosed in the '734 Patent, TDA indirectly infringed the '734 Patent by inducing infringement by others, such as its broker-dealers, including TDAC and TDATC by, for example, encouraging its broker-dealers to sell and/or offer to sell TD Ameritrade's FDIC Insured Deposit Account products and providing the services with respect to those products for the broker dealers.

- 268. Upon information and belief, with knowledge of the technology disclosed in the '734 Patent, TDHC indirectly infringed the '734 Patent by inducing Scottrade to sell and/or offer to sell TD Ameritrade's FDIC Insured Deposit Account products and providing the services with respect to those products. 2016 Amendment, p. 2 ("Ameritrade Parent [TDHC] will cause Scottrade to perform the functions contemplated by Section 1 of the [2013] IDA Agreement with respect to the Scottrade Master Accounts on the same terms and subject to the same conditions as set forth therein.").
- 269. Upon information and belief, with knowledge of the technology disclosed in the '734 Patent, Schwab indirectly infringed the '734 Patent by inducing infringement by others, such as its broker-dealers, including TDAC and TDATC by, for example, encouraging its broker-dealers to sell and/or offer to sell TD Ameritrade's FDIC Insured Deposit Account products and providing the services with respect to those products for the broker dealers. 2019 Amendment, p. 2 ("Schwab will cause (i) its subsidies that are broker-dealers as of the Closing, including Charles Schwab & Co., Inc. and the TDA Broker-Dealers [TDAC and TDATC]...to make available to their Customers the sweep program contemplated by this Agreement to the extend necessary for Schwab to satisfy its obligations hereunder and will cause the Broker-Dealers to take all other actions required of them pursuant to this Agreement.").
- 270. Upon information and belief, TD Ameritrade, including TDA and Scottrade, was aware of the technology disclosed in the '734 Patent prior to the period of infringement through prior business discussions with Double Rock regarding the published U.S. Publication No. 2002-0091637 A1 (which matured into the '551 Patent) and priority patent, the '231 Patent.
- 271. TD Ameritrade, including TDAC, TDATC, and Scottrade, directly infringed the '734 Patent based upon at least the following:

- 272. From at least June 2015 through at least March 15, 2021, TD Ameritrade, including TDAC, TDATC, and Scottrade, made, used, offered for sale and/or sold, "a cash sweep program to enable [clients] to earn interest on cash balances in [the clients'] TD Ameritrade account." 2020 Cash Sweep Balance Program Summary; see also 2019 Amendment, p. 2 ("Schwab will cause...its subsidiaries that are broker-dealers as of the Closing, including Charles Schwab & Co., Inc. and the TDA Broker Dealers...to make available to their Customers the sweep program contemplated by this Agreement to the extent for Schwab to satisfy its obligations hereunder and will cause the Broker Dealers to take all other actions required of them pursuant to this Agreement.").
- 273. As Section 1 of the 2013 IDA makes clear, TDAC and TDATC directly performed infringing acts that are the basis of this Complaint. 2013 IDA, pp. 5-6 ("[TDAC/TDATC will act as the authorized agent, nominee, custodian and messenger of each [TDAC/TDATC] Customer...in establishing, maintain, making deposits to and withdrawals from, and effecting other transactions in the [TDAC/TDATC] Master Accounts established and maintained by [TDAC/TDATC] in [their] name."; "[TDAC/TDATC] hereby agree[] to act as recordkeeper in maintaining the information set forth in Section 10 with respect to the [TDAC/TDATC] Customer Accounts."). As the 2016 Amendment to the 2013 IDA makes clear, Scottrade (the liabilities of which were assumed by TDHC) also directly performed infringing acts that are the basis of this Complaint. 2016 Amendment, p. 2 ("Ameritrade Parent [TDHC] will cause Scottrade to perform the functions contemplated by Section 1 of the [2013] IDA Agreement with respect to the Scottrade Master Accounts on the same terms and subject to the same conditions as set forth therein.").
- 274. TD Ameritrade's "FDIC Insured Deposit Account" "serve[d] as the primary cash sweep vehicle for earning income on cash balances in TD Ameritrade brokerage accounts and is

the default cash sweep vehicle..." *See* 2020 Cash Sweep Program Summary; 2016 Cash Balance Programs Summary.

- 275. Thus, as part of its FDIC Insured Deposit Account program, TD Ameritrade practiced a method for managing a plurality of client accounts for a plurality of clients through the use of one or more computers. For example, TD Ameritrade "receive[d] and process[ed] trade orders through a variety of electronic channels, including the Internet [and] mobile trading applications...[which] are heavily dependent on the integrity of the electronic systems supporting them." See 2018 Form 10-K, p. 13. Such orders were made through TD Ameritrade's "Online Cash Services" (see TD Ameritrade Cash Management Services), or through the trading applications it has developed for mobile devices, including the Android, iPhone, and iPad. See Cash Management Services; 2017 Cash Management Services; see also 2018 Form 10-K, p. 13 ("We receive and process trade orders through a variety of electronic channels, including the Internet, mobile trading applications and our interactive voice response system. These methods of trading are heavily dependent on the integrity of the electronic systems supporting them."); "About Us" ("In 2010 and 2011 the company embraced mobile devices by developing trading application for the Android, iPhone, and iPad.").
- 276. As part of its FDIC Insured Deposit Account program, TD Ameritrade accessed, by one or more computers, a database comprising information from each client account that had client account funds aggregated with funds of a plurality of other of the client accounts and were held in one or more FDIC-insured and interest-bearing aggregated deposit accounts held in one or more FDIC-insured banking institutions, with the information for each of the client accounts including information on client's funds held in said one or more insured and interest-bearing aggregated deposit accounts. For example, TD Ameritrade swept its clients' uninvested cash into

"FDIC-insured (up to specified limits) money market deposit accounts at" depository financial institutions. *See* 2018 Form 10-K, p. 87; *see also* 2013 IDA, p. 4 ("[O]ne or more omnibus [i.e., aggregated] Money Market Deposit Accounts representing individual Money Market Deposit Accounts of [TD Ameritrade, including TDAC, TDATC, and Scottrade,] Customers will be established and maintained at TD Bank USA in the name of [TDAC/TDATC/Scottrade] as agent and custodian for its customers"); 2020 Cash Sweep Program Summary ("In the unlikely event that a Program Bank should fail, each depositor with IDA balances is insured, up to the \$250,000 limit").

- 277. In addition, as part of its FDIC Insured Deposit Account program, TD Ameritrade could hold the client account funds in aggregated deposit accounts at different depository financial institutions, as "[t]he bank sweep program [was] designed to provide [clients] with access to at least two Program Banks". *See* 2020 Cash Sweep Program Summary, p. 2. Currently, the Program Banks include TD Bank N.A., TD Bank USA, N.A., USA Bank N.A., Citibank, N.A., Wells Fargo Bank, N.A., to name a few. *See* TD Ameritrade IDA Program Banks at https://www.tdameritrade.com/retail-en_us/resources/pdf/TDA1000713.pdf.
- 278. In managing the client accounts, TD Ameritrade acted as the recordkeeper in maintaining information of client accounts and as the authorized agent and custodian in maintaining and effecting transactions in aggregated deposit accounts. *See* 2013 IDA, pp. 5-6, 16; 2016 Amendment, pp. 1-2; 2019 Amendment, pp. 2-3, 10 ("As agent and custodian for the Customers, [TD Ameritrade, including TDAC and TDATC,] [maintained], in good faith and in the regular course of business, and in accordance with applicable published requirements of the FDIC (including, without limitation, FDIC requirements for pass-through deposit insurance coverage), books and records setting forth the daily balance and accrued interest in the Customer

Accounts."); see also 2020 Client Agreement, p. 6 ("My account statement will display...the balance of deposits at each Program Bank [and] any withdrawals made during the month"); 2019 Client Agreement, p. 6; 2017 Client Agreement, p. 5. For example, TD Ameritrade was responsible for preparing client statements, the "possession, control and safeguarding of funds and securities in client accounts," and "processing cash sweep transactions to and from bank deposit accounts and money market mutual funds." See 2018 Form 10-K, pp. 8-9.

- 279. Thus, TD Ameritrade accessed databases including information for individual client accounts and respective client funds held in aggregated deposit accounts at banking institutions.
- 280. As part of its FDIC Insured Deposit Account program, TD Ameritrade administered deposits to and withdrawals from each of a plurality of client accounts, including more than six withdrawals in a month from each of a plurality of the client accounts, with one or more of said withdrawals made by debit card. For example, clients were provided "the freedom to access, spend, and manage [their] money...with a debit card [and/or] free check writing." See Cash Management Services ("Paying bills, making purchases, and moving funds around is just a part of life...With Online Cash Services, you can quickly and easily:...enjoy added convenience with Apple Pay on your Visa® debit card issued by TD Bank USA, N.A. [and] securely deposit checks using the TD Ameritrade Mobile app on your smartphone or tablet."); see also 2017 Cash Management Services.
- 281. As part of its FDIC Insured Deposit Account program, TD Ameritrade determined on a regular basis one or more net transactions as sums of said deposits to and withdrawals from said client accounts, and determined from said net transactions whether to deposit funds to or withdraw funds from said one or more FDIC-insured and interest-bearing aggregated deposit

accounts. For example, in order to properly maintain and make deposits to and withdrawals from deposit accounts, TD Ameritrade, including aggregated TDAC, TDATC, and Scottrade, determined, on a daily basis, net transactions as sums of deposits to and withdrawals from client accounts. See 2013 IDA, p. 4; 2016 Amendment, pp. 1-2; 2019 Amendment, p. 1; see also 2020 Cash Sweep Program Summary. For example, TD Ameritrade netted the withdrawals and deposits of individual client accounts, and used those netting results in order to determine the necessary net transaction to and from aggregated deposit accounts. See 2020 Cash Sweep Program Summary, p. 1. Thus, based on the net transaction result, TD Ameritrade determined whether to deposit or withdraw funds from aggregated deposit accounts.

- 282. As part of its FDIC Insured Deposit Account program, TD Ameritrade made more than six withdrawals in a month of funds from one of the FDIC-insured and interest-bearing aggregated deposit accounts via at least one intermediate bank that is different from the one or more FDIC-insured banking institutions. For example, TD Ameritrade, including TDAC, TDATC and Scottrade, acted as the authorized agent and messenger of each client in making deposits to and withdrawals from, and effecting other transactions in aggregated deposit accounts. *See* 2013 IDA, pp. 5-6; 2016 Amendment, p. 2; 2019 Amendment, p. 2. All withdrawals were made no more than once a day pursuant to instructions delivered by TD Ameritrade, including TDAC, TDATC and Scottrade, which subsequently "receive[d] evidence of the Depository Institution's receipt of the withdrawal and transfer instructions for same day funds representing the total of such withdrawals to be made." *See* 2013 IDA, p. 15; 2019 Amendment, p. 9.
- 283. On information and belief, such withdrawals from aggregated deposit accounts managed by TD Ameritrade, including TDAC, TDATC, and Scottrade, as discussed above, were made no more than once on any business day (*i.e.*, more than six withdrawals in a

month) (see 2013 IDA, p. 15; 2019 Amendment, p. 9) through an intermediate bank. *See* TD Ameritrade Wire Transfer Form at https://www.tdameritrade.com/content/dam/tda/retail/marketing/en/pdf/TDA111.pdf (identifies Wells Fargo Bank N.A. as current intermediate bank).

- As part of its FDIC Insured Deposit Account program, TD Ameritrade updated the 284. database with deposits to and withdrawals from said each client account. For example, in order to properly maintain client accounts and assume responsibility as a recordkeeper, TD Ameritrade updated the database with deposits to and withdrawals from such client accounts to provide its clients with the services that are offered as part of the Online Cash Services. See Cash Services; 2013 IDA, pp. 5-6, 2016 Amendment, pp. 1-2; Management 16; Amendment, pp. 2-3, 10 ("As agent and custodian for the Customers, [TD Ameritrade, including TDAC and TDATC, [maintained], in good faith and in the regular course of business, and in accordance with applicable published requirements of the FDIC (including, without limitation, FDIC requirements for pass-through deposit insurance coverage), books and records setting forth the daily balance and accrued interest in the Customer Accounts."); 2018 Form 10-K, pp. 8-9; see also 2020 Client Agreement, p. 6 ("My account statement will display...the balance of deposits at each Program Bank [and] any withdrawals made during the month"); 2019 Client Agreement, p. 6; 2017 Client Agreement, p. 5.
- 285. Island satisfied all statutory obligations required to collect pre-filing damages for the full period allowed by law for infringement of the '734 Patent.
- 286. The foregoing and indirect direct infringement of the '734 Patent was deliberate and willful.

PRAYER FOR RELIEF

WHEREFORE, Island respectfully requests that this Court:

- A. On its First through Fifth Causes of Action:
 - 1. Enter judgment that TD Ameritrade infringes the '551 Patent;
 - 2. Enter judgment that TD Ameritrade infringes the '821 Patent;
 - 3. Enter judgment that TD Ameritrade infringes the '916 Patent;
 - 4. Enter judgment that TD Ameritrade infringes the '286 Patent;
 - 5. Enter judgment that TD Ameritrade infringes the '734 Patent;
 - 6. Award damages, jointly and severally, against TD Ameritrade, to compensate Island for the infringement of the Patents-in-Suit, trebled to compensate Island for their willful infringement, pursuant to 35 U.S.C. § 284, with interest thereon, in an amount to be determined; and
 - 7. Enter judgment deeming this to be an exceptional case within the meaning of 35 U.S.C. § 285, entitling Island to an award of costs, reasonable attorney's fees, and expenses incurred in this action, jointly and severally, against TD Ameritrade.
- B. And, on all Causes of Action, award such other and further relief as the Court may deem just and proper.

JURY DEMAND

Island demands a trial by jury on all issues properly tried to a jury.

DATED: July 20, 2021

Respectfully submitted,

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