| Case 2 | 2:20-cv-07872-GW-PVC | Document 40 | Filed 11/11/20 | Page 1 of 86 | Page ID #:379 |
|---|--|--|--------------------------|---|---|
| 1 2 3 4 5 6 7 8 9 10 | QUINN EMANUEL U & SULLIVAN, LLP Kevin P.B. Johnson (E kevinjohnson@quinne Todd M. Briggs (Bar N toddbriggs@quinnema 555 Twin Dolphin Dri Redwood Shores, Cali Telephone: (650) 801- Facsimile: (650) 801- QUINN EMANUEL U & SULLIVAN, LLP Eric Huang (pro hac v erichuang@quinnemai 51 Madison Avenue, 2 New York, New York Telephone: (212) 849- Facsimile: (212) 849- | Bar No. 177129 manuel.com No. 209282) muel.com ve, 5th Floor fornia 94065 -5000 5100 JRQUHART <i>ice application</i> nuel.com 22nd Floor 10010 | | | |
| 11 12 | Attorneys for Plaintiff NANTWORKS, LLC | S | OLDINGS IP, I | LLC | |
| 12 13 14 15 16 17 | UNITED STATES DISTRICT COURT FOR THE CENTRAL DISTRICT OF CALIFORNIA NANTWORKS, LLC, a Delaware limited liability company, and NANT HOLDINGS IP, LLC, a Delaware FIRST AMENDED COMPLAINT | | | | |
| 18 19 | limited liability compa Plaintiffs | uny, | FOR PA COPYR TRADE | AMENDED TENT INFF IGHT INFR SECRET PROPRIATI H OF CON1 | COMPLAINT RINGEMENT, INGEMENT, ON, AND |
| 20 | VS. | | BREAC | H OF CONT | TRÁCT |
| 21 22 | BANK OF AMERICA CORPORATION, a D corporation, and BAN | elaware | | RIAL DEM | |
| 22 | AMERICA, N.A., a na association, | ational banking | g Trial Da | te: No | ne Set |
| 24 | Defendan | ts. | | | |
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| | FIRST AMEND | ED COMPLAINT I | FOR PATENT INFRI | | No. 2:20-cv-7872-GW-PVC YRIGHT INFRINGEMENT, |
| | | | | | BREACH OF CONTRACT |

Plaintiffs NantWorks, LLC and Nant Holdings IP, LLC ("Nant IP")
 (collectively, "NantWorks" or "Plaintiffs"), through their attorneys and for their
 claims against Defendants Bank of America Corporation ("BAC") and Bank of
 America, N.A. ("BNA") (collectively, "BoA" or "Defendants"), allege as follows:

THE PARTIES

6 1. Plaintiff NantWorks, LLC is a Delaware limited liability company with
7 its principal place of business at 9920 Jefferson Boulevard, Culver City, CA 90232.

8 2. Plaintiff Nant Holdings IP, LLC is a Delaware limited liability company
9 with its principal place of business at 9920 Jefferson Boulevard, Culver City, CA
10 90232.

3. Upon information and belief, Defendant Bank of America Corporation
is a Delaware corporation with its principal place of business at Bank of America
Corporate Center, 100 N. Tryon Street, Charlotte, NC 28255.

4. Upon information and belief, Defendant Bank of America, N.A. is a
federally chartered national banking association organized and existing under the laws
of the United States and a wholly owned subsidiary of Bank of America Corporation,
with its principal place of business at Bank of America Corporate Center, 100 N.
Tryon Street, Charlotte, NC 28255.

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JURISDICTION AND VENUE

20 5. This civil action contains claims for patent infringement arising under
21 the patent laws of the United States, 35 U.S.C. § 1 *et seq*.

6. This civil action contains claims for copyright infringement arising under
the copyright laws of the United States, 17 U.S.C. § 1 *et seq*.

7. This civil action contains claims for trade secret misappropriation arising
under the Defend Trade Secrets Act of 2016, 18 U.S.C. § 1836 *et seq*.

8. This Court has subject matter jurisdiction under 28 U.S.C. §§ 1331 and
 1338(a) because this action arises under the patent laws of the United States, 35
 U.S.C. § 1 *et seq.*, the copyright laws of the United States, 17 U.S.C. § 1 *et seq.*, and
 -1-

the Defend Trade Secrets Act of 2016, 18 U.S.C. § 1836 et seq.

2 9. This Court has supplemental jurisdiction over NantWorks' state law
3 claims pursuant to 28 U.S.C. §1367(a).

- This Court has personal jurisdiction over BoA because it has committed 10. 4 acts in this District that give rise to all acts of infringement and misappropriation 5 asserted herein. This Court also has personal jurisdiction over BoA because it has 6 substantial, systematic and continuous contacts with this District. BoA has a regular 7 and established place of business in the State of California and in this District, 8 9 including operating hundreds of bank branches and ATMs in California and in this judicial District, and conducts business with its customers residing in this District both 10 through its bank branches and ATMs and its online and mobile banking services. 11
- 11. BoA has committed and continues to commit acts of infringement in
 violation of 35 U.S.C. § 271, and has made, used, marketed, distributed, offered for
 sale, sold, and/or imported infringing products in the State of California, including in
 this District, and engaged in infringing conduct within and directed at or from this
 District. For example, on information and belief, BoA has numerous customers who
 utilize BoA's mobile check deposit software for mobile check deposit, thereby
 infringing and causing BoA to infringe the Asserted Patents.

19 12. Venue is proper in this District under the provisions of 28 U.S.C.
20 §§ 1391 and 1400(b) at least because a substantial part of the events or omissions
21 giving rise to the claims occurred in this judicial district, and because BoA has
22 committed acts of infringement in this District and has a regular and established place
23 of business in this District.

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INTRODUCTION

13. This dispute is based on BoA's unauthorized use and misappropriation
of NantWorks' pioneering image recognition technology in BoA's widely used
mobile check deposit solution.

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- 14. In early 2010, Matt Calman, a BoA executive, witnessed a demonstration -2- Case No. 2:20-cv-7872-GW-PVC

of NantWorks' image recognition technology.¹ He was "very impressed" by
NantWorks' technology and approached NantWorks regarding a partnership
involving image recognition solutions for mobile devices. The companies then
entered into a series of agreements that would allow BoA to evaluate NantWorks'
image recognition technology and for both companies to collaborate in
commercializing this technology in new and impactful applications, including mobile
check deposit.

8 15. Pursuant to their agreements, during 2011 and 2012 NantWorks developed mobile check deposit software that vastly outperformed BoA's then 9 10 existing solution. BoA was intrigued by the performance of NantWorks' mobile check deposit software and led NantWorks to believe that BoA would incorporate 11 NantWorks' mobile check deposit software into the commercial version of BoA's 12 13 Mobile Banking application and compensate NantWorks for the use of its technology. After delivering a complete version of NantWorks' software and related confidential 14 technical information, however, NantWorks did not receive further updates on the 15 project. NantWorks assumed that BoA decided to pursue its existing technology. 16

17 16. Several years later, NantWorks uncovered information demonstrating
18 that BoA not only continued to use NantWorks' software without authorization, but
19 that BoA had incorporated NantWorks' proprietary image recognition technology and
20 NantWorks' intellectual property into its mobile check deposit solution. As explained
21 below, BoA's actions give rise to NantWorks' claims for patent infringement,
22 copyright infringement, trade secret misappropriation, and breach of contract.

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²⁶ ¹ Formed in 2011, NantWorks (through predecessor companies) acquired a
 ²⁷ number of image recognition companies, including IPPLEX in August 2010 and
 ²⁸ Evryx in February 2011. Reference to Nantworks in this Complaint refers to both
 Nantworks and its predecessor entities including IPPLEX and Evryx.

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FACTUAL BACKGROUND NantWorks, Evryx, and IPPLEX

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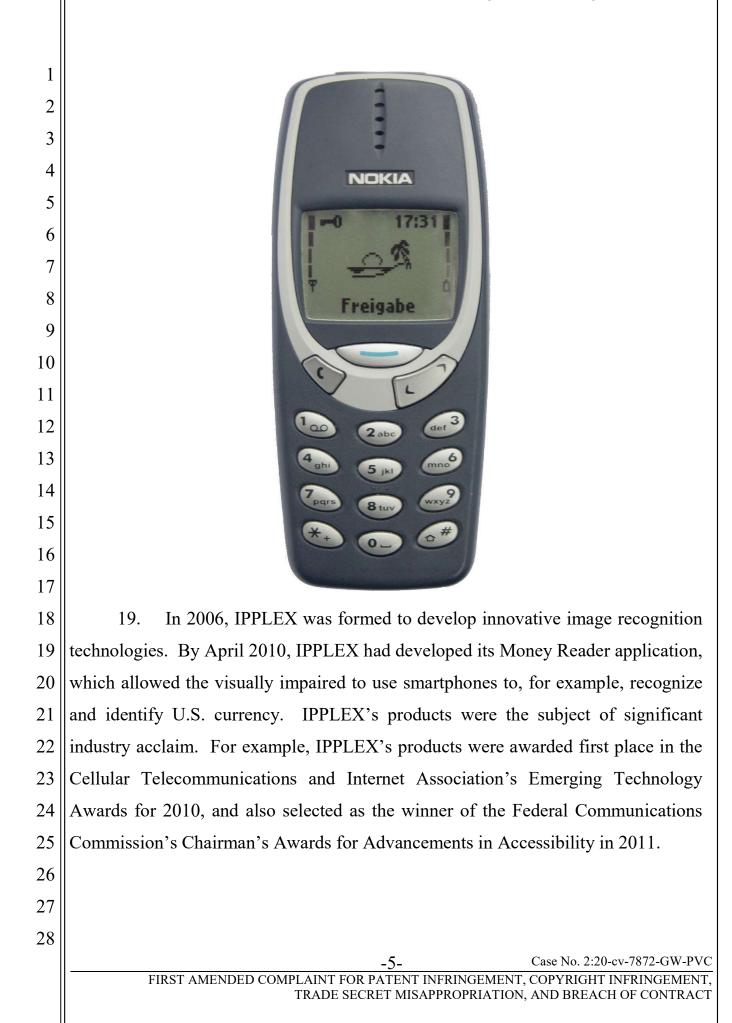
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3 17. NantWorks was formed in 2011 to, among other things, develop solutions to real-world machine vision and image recognition challenges. NantWorks 4 5 recognized the benefits of using mobile devices to recognize features in digital images and the application of such technology to numerous industries, including financial 6 To expand its depth in this field, NantWorks (through predecessor 7 services. 8 companies) acquired a number of image recognition companies, including IPPLEX 9 in August 2010 and Evryx in February 2011.

10 18. Evryx had developed and patented fundamental image recognition technology in the early 2000s. Its technology allowed mobile devices to capture 11 images/video, recognize specific features in the images/video, and provide 12 13 information associated with the recognized features to users. Evryx's technology was years ahead of its time, being developed well before the introduction of the first 14 iPhone in 2007 and other early smartphones. Indeed, Evryx's technology was 15 developed when mobile phones had very limited functionality and certainly nothing 16 approaching the image recognition technologies that are in use today. For example, 17 one of the most successful mobiles phones released in the early 2000s was the Nokia 18 3310 shown below, which did not include any capability for image recognition 19 technology, let alone an integrated camera²: 20

² https://en.wikipedia.org/wiki/Nokia_3310#/media/File:Nokia_3310_blue.jpg <u>-4-</u> Case No. 2:20-cv-7872-GW-PVC FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT, COPYRIGHT INFRINGEMENT, TRADE SECRET MISAPPROPRIATION, AND BREACH OF CONTRACT



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BoA's Evaluation of NantWorks' Image Recognition Technology

After the introduction of the iPhone in 2007 and the widespread adoption 3 20. of smartphones in the late 2000s, the banking industry began to recognize the 4 5 importance of mobile banking. Banks soon realized that one of the most important mobile banking offerings was the ability to deposit checks using mobile devices. By 6 eliminating the need for customers to deposit checks at brick and mortar branches, 7 8 banks and their customers could save significant time and money using mobile check deposits. BoA has specifically attributed its mobile banking growth to its ability to 9 achieve savings by closing branches and reducing headcount.³ Indeed, BoA's CEO 10 Brian Moynihan recently described mobile check deposits as offering "tenfold" 11 12 savings to BoA over physical deposits.⁴

13 21. In April 2010, NantWorks⁵ demonstrated its image recognition
14 technology to attendees of an industry conference. Matt Calman – a Senior Vice
15 President and Research and Development Executive at BoA who was involved in
16 developing new banking applications – attended the conference and witnessed
17 NantWorks' demonstration. Immediately after the demonstration, Mr. Calman called
18 NantWorks' image recognition technology "very impressive."

19 22. That same month, Mr. Calman reached out to NantWorks and expressed
20 interest in having NantWorks develop image recognition technologies for BoA. At
21 that time, on information and belief, the mobile check deposit solution BoA was
22 developing suffered from significant performance issues.

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23. Shortly after Mr. Calman reached out to NantWorks, the parties entered

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³ https://www.businessinsider.com/bank-branches-around-the-world-are-

- 26 shrinking-in-favor-of-digital-models-2016-10
- ⁴ https://www.nasdaq.com/articles/bank-america-corp-bac-q1-2019-earnings-call-transcript-2019-04-16?amp
 ⁵ NewtWeedee equalsta dita equalization of IDDL EV in America 2010

⁵ NantWorks completed its acquisition of IPPLEX in August 2010.

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into the first of a series of agreements that enabled BoA to evaluate NantWorks' 1 2 image recognition technology for potential use by BoA in its mobile check deposit 3 software. These agreements allowed BoA to use confidential technical information provided by NantWorks in a very limited way - that is, only for the purpose of 4 5 evaluating NantWorks' technology for potential use in BoA's mobile check deposit solution. The agreements prohibited BoA from using NantWorks' technology and 6 confidential information for any other purpose. The agreements also prohibited BoA 7 8 from using NantWorks' confidential information for any purpose following the end 9 of the evaluation.

10 24. As the partnership between BoA and NantWorks progressed, they entered into a collaboration agreement dated October 31, 2011. This agreement, 11 which included limited use restrictions like BoA and NantWorks' earlier agreements, 12 13 made clear that NantWorks maintained all rights to all image recognition technology that it developed in connection with its partnership with BoA as well as its preexisting 14 image recognition technology. It also required BoA to return or destroy any 15 confidential information disclosed by NantWorks upon termination of the agreement. 16 The collaboration agreement had a term of two years and any rights granted to the 17 parties terminated upon its expiration. 18

19 25. In November 2011, BoA and NantWorks met to discuss next steps under their collaboration agreement. NantWorks agreed to begin development of a mobile 20check deposit solution that addressed the issues exhibited by BoA's existing solution. 21 During the course of this development effort, BoA's input was limited to describing 22 23 issues with BoA's existing mobile check deposit solution and identifying high-level 24 user experience features they desired. NantWorks understood that if it was able to develop a mobile check deposit solution that performed better than BoA's mobile 25 check deposit solution, BoA would incorporate NantWorks' solution into its mobile 26 banking application and compensate NantWorks for the use of its technology and 27 28 intellectual property.

26. By March 2012, NantWorks had developed the first version of its 1 2 proprietary mobile check deposit software. Over the next several months NantWorks 3 continued its development efforts, improving its mobile check deposit software to greatly increase its processing speed, consumer usability, and overall reliability. By 4 5 June 2012, NantWorks' software included fast and reliable optical character recognition ("OCR") for routing and account numbers on paper checks and a video-6 based image viewfinder that automatically captured paper check images ("auto-7 8 capture") of sufficient quality for processing. NantWorks' software also consistently detected errors that BoA's existing mobile check deposit solution had failed to detect 9 10 with sufficient accuracy for consumer use. These included error detection for overlapping check images and verification that a user was attempting to deposit U.S.-11 based checks. 12

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27. To enable BoA to evaluate NantWorks' mobile check deposit solution, NantWorks provided BoA with complete demonstration applications which included 14 NantWorks proprietary mobile check deposit technology. 15

16 28. In June and July of 2012, BoA performed testing of NantWorks' mobile check deposit software against its own mobile check deposit software. This testing 17 18 revealed the superiority of NantWorks' technology and showed that BoA's software 19 relied on an image capture method that was slow, unreliable, and too cumbersome for its customers to consider useful. For example, BoA's testing showed that NantWorks' 2021 software was able to process a check image over ten times faster than BoA's existing solution. BoA also determined that NantWorks' software provided a much more 22 23 accurate check screening mechanism, with a lower proportion of checks falsely 24 accepted and falsely declined compared to BoA's solution. Based on its testing results, BoA expressed serious concerns about the viability of its mobile check deposit 25 software for consumer use. 26

27 Upon information and belief, in July of 2012, even though it knew its 29. 28 existing solution was far inferior to NantWorks' solution, BoA released the first Case No. 2:20-cv-7872-GW-PVC commercial version of its Mobile Banking application which included its mobile
 check deposit software. Upon information and belief, BoA did so because it was
 under pressure to remain competitive with other banks that had already released
 commercial mobile check deposit capabilities to their customers.

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30. During the remainder of 2012, BoA continued to express its desire to implement NantWorks' mobile check deposit software in BoA's Mobile Banking application. For example, BoA informed NantWorks that it was looking closely at NantWorks' software, that BoA hoped to put that software into production, and reached out to NantWorks to begin commercial licensing discussions.

10 31. In early 2013, NantWorks continued to believe that BoA intended to implement its mobile check deposit software in BoA's Mobile Banking application. 11 NantWorks' shared additional information about its mobile check deposit solution 12 13 with BoA, including developer manuals and header files. The headers files included information that allowed BoA to incorporate NantWorks' mobile check deposit 14 technology into its own mobile checking application. The source code and algorithms 15 implemented in NantWorks' mobile check deposit software was and is extremely 16 17 sensitive and included NantWorks' trade secrets. And as had been the case 18 throughout 2011 and 2012, the information NantWorks shared was only to be used 19 for evaluation purposes.

32. After providing this additional information regarding NantWorks'
mobile check deposit software to BoA in early 2013, BoA began to express less
interest and ultimately ceased communications with NantWorks about the project.

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BoA's Improper and Unauthorized Acquisition and Use of NantWorks' Image Recognition Technology

33. After 2013, NantWorks believed that BoA had decided to continue to
develop its own mobile check deposit technology. Consequently, NantWorks
believed that BoA would honor its agreements to cease all use of and return or destroy
NantWorks' confidential information pursuant to the parties' agreements.

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1 34. In the Spring of 2018, however, NantWorks discovered that the mobile 2 check deposit software it provided in 2013 to BoA continued to be used by BoA after 3 the conclusion of prior work between NantWorks and BoA. Several months before 4 this discovery, NantWorks began an investigation to determine whether companies, 5 including BoA, may be using its patented technologies. As part of its investigation of BoA, NantWorks reviewed materials relating to its prior collaboration with BoA, 6 including the mobile check deposit software NantWorks had provided BoA. This 7 review led to the discovery, in early 2018, of a software development database that 8 was used for testing and debugging purposes during the development of NantWorks' 9 mobile check deposit software several years earlier. This development database 10 recorded certain reports when NantWorks' software was being accessed and used, 11 including the date and time of each access and use, and information about the network 12 13 from which each access and use originated. Because development of NantWorks' mobile check deposit software had ceased in 2013, NantWorks had no reason to 14 access this development database after that time and accordingly had not accessed the 15 database since that time. 16

17 35. In its subsequent examination in 2018 of the development database,
18 NantWorks discovered a large number of reports that occurred during 2014, 2015,
19 2016, 2017 and 2018. Upon further investigation, NantWorks determined that these
20 reports originated from the mobile check deposit software that it provided to BoA
21 under the parties' prior agreements based in part on information within the reports
22 indicating that the use of NantWorks' software originated from BoA networks.

36. Upon information and belief, BoA improperly accessed and improperly
 used NantWorks' mobile check deposit software hundreds of times during 2014,
 2015, 2016, 2017 and 2018 to gain an understanding of how NantWorks' software
 functioned and acquire trade secrets within NantWorks' software. Upon information
 and belief, BoA then incorporated and used the NantWorks trade secrets it improperly
 accessed, acquired, and used during 2014, the NantWorks trade secrets it improperly

accessed, acquired, and used during 2015, the NantWorks trade secrets it improperly 1 2 accessed, acquired, and used during 2016, the NantWorks trade secrets it improperly 3 accessed, acquired, and used during 2017, and the NantWorks trade secrets it improperly accessed, acquired, and used during 2018 in different versions of its own 4 5 mobile check deposit solution, including the commercially available versions of its mobile check deposit software that BoA has provided to its customers from 2014 to 6 7 the present.

8 37. NantWorks also investigated the timing of the reports in relation to changes made to BoA's mobile check deposit software. This analysis revealed that 9 10 there were several periods of time where a high number of reports originated from 11 BoA or BoA affiliated networks followed thereafter by changes to BoA's software that significantly improved its mobile check deposit functionality for users. For 12 13 example, following the 2014 unauthorized use of NantWorks' mobile check deposit software as reflected in the development database, BoA implemented automatic 14 image capture and confirmation features, which were developed by NantWorks and 15 found in NantWorks' proprietary mobile check deposit software. 16

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The software development database continued to receive reports into the 38. 18 Spring of 2018. The reports permanently stopped, however, after NantWorks 19 discovered the reports in the Spring of 2018 and subsequently requested a meeting with BoA to discuss its unauthorized use of NantWorks' intellectual property. 20

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<u>The Importance of BoA's Mobile Check Deposit Solution</u>

22 39. Mobile check deposits have become a critical aspect of BoA's business. 23 For example, BoA's press releases touted the fact that by the first quarter of 2016 its customers "used their mobile devices to deposit more than 254,000 checks daily"⁶ a 24

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²⁷ https://newsroom.bankofamerica.com/press-releases/consumer-banking/fessmajority-americans-deny-their-smartphone-behaviors 28

figure which rose to over 340,000 checks daily by the second quarter of 2017.⁷ By
 the fourth quarter of 2018, BoA's customers were depositing over 390,000 checks via
 mobile devices daily⁸ and in 2019, BoA's CEO Brian Moynihan noted on an earnings
 call that "77% of [BoA's] deposit transactions are now done through digital means."⁹

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NantWorks' Image Recognition Patents

40. NantWorks has developed a patent portfolio in the field of image
recognition, currently numbering over 120 issued patents. These patents originated
with Evryx and are based on Evryx's fundamental image recognition technology.
NantWorks' imaging recognition patent portfolio includes the following United
States Patents that are being asserted in this case ("Asserted Patents").

41. The United States Patent Office issued U.S. Patent No. 7,881,529, titled
"Data capture and identification system and process" (the "'529 patent"). The '529
patent issued on February 1, 2011. A true and correct copy of the '529 patent is
attached hereto as Exhibit A.

42. The United States Patent Office issued U.S. Patent No. 7,899,252, titled
"Object information derived from object images" (the "252 patent"). The '252 patent
issued on March 1, 2011. A true and correct copy of the '252 patent is attached hereto
as Exhibit B.

19 43. The United States Patent Office issued U.S. Patent No. 8,326,038, titled
20 "Object information derived from object images" (the "'038 patent"). The '038 patent
21 issued on December 4, 2012. A true and correct copy of the '038 patent is attached
22 hereto as Exhibit C.

- 23
- ⁷ https://newsroom.bankofamerica.com/press-releases/consumer ⁸ banking/keeping-digital-natives
- 26 8 https://newsroom.bankofamerica.com/press-releases/consumer-banking/bankamericas-ericar-surpasses-6-million-users
- 28 https://www.nasdaq.com/articles/bank-america-corp-bac-q1-2019-earningscall-transcript-2019-04-16?amp

44. The United States Patent Office issued U.S. Patent No. 8,463,030, titled
 "Image capture and identification system and process" (the "030 patent"). The '030
 patent issued on June 11, 2013. A true and correct copy of the '030 patent is attached
 hereto as Exhibit D.

5 45. The United States Patent Office issued U.S. Patent No. 8,478,036, titled
6 "Image capture and identification system and process" (the "'036 patent"). The '036
7 patent issued on July 2, 2013. A true and correct copy of the '036 patent is attached
8 hereto as Exhibit E.

9 46. The United States Patent Office issued U.S. Patent No. 8,520,897, titled
10 "Object information derived from object images" (the "897 patent"). The '897 patent
11 issued on August 27, 2013. A true and correct copy of the '897 patent is attached
12 hereto as Exhibit F.

47. The United States Patent Office issued U.S. Patent No. 9,031,278, titled
"Image capture and identification system and process" (the "278 patent"). The '278
patent issued on May 12, 2015. A true and correct copy of the '278 patent is attached
hereto as Exhibit G.

48. The United States Patent Office issued U.S. Patent No. 9,324,004, titled
"Image capture and identification system and process" (the "'004 patent"). The '004
patent issued on April 26, 2016. A true and correct copy of the '004 patent is attached
hereto as Exhibit H.

21 49. The Asserted Patents identify Wayne C. Boncyk and Ronald H. Cohen
22 as inventors.

23 50. The claims of the Asserted Patents are directed to technological 24 improvements in the way mobile computing systems operate. Specifically, the claims 25 relate to improved machine vision techniques that enable mobile computing systems 26 to capture images of physical objects, process those images, and then return 27 information relating to those objects to the user of the mobile computing system based 28 solely on remotely acquired data associated with the physical object. *See, e.g.,* '529 -13- Case No. 2:20-cv-7872-GW-PVC

patent at 3:56-64 ("The present invention includes a novel process whereby 1 2 information such as Internet content is presented to a user based solely on a remotely 3 acquired data of a physical object. Although coded information can be included in the remotely acquired image, it is not required since no additional information about 4 5 a physical object, other than its image, needs to be encoded in the linked object. There is no need for any additional code or device, radio, optical or otherwise, to be 6 embedded in or affixed to the object."). As the specifications of the Asserted Patents 7 8 explain, various prior art techniques were used to associate physical objects with digital information, such as applying a barcode or a radio or optical transceiver to the 9 object to locate the information. E.g., id. at 2:13-19 ("Traditional methods for linking 10 objects to digital information, including applying a barcode, radio or optical 11 12 transceiver or transmitter, or some other means of identification to the object, or 13 modifying the data or object so as to encode detectable information in it, are not required because the data or object can be identified solely by its visual 14 appearance."). Unlike the inventions described in the Asserted Patents, these 15 techniques required the physical manipulation of the physical object to allow linking 16 17 of information to the object. For example, in the case of a barcode, the barcode is physically applied to the object, requiring time and effort to allow the object to be 18 identifiable. Such modification of an object may also be undesirable as it may 19 disfigure the desired appearance of the object. E.g., id. at 1:32-34 ("There is a need 20to identify an object that has been digitally captured from a database of images 21 22 without requiring modification or disfiguring of the object").

51. In addition, the claims of the Asserted Patents involve novel
 combinations of elements relating to machine vision techniques and specific
 applications of those techniques, not merely the recitation of well-understood, routine,
 or conventional technologies or components. The use of these machine vision
 techniques to identify physical objects and subsequently associate such physical
 objects to information relating to the object based solely on remotely acquired data

associated with the object was not well-known, understood, or routine at the time of
 the inventions of the Asserted Patents and provided a specific improvement over prior
 art systems and methods.

4 52. Nant IP is the owner of all rights, title, and interest in and to the Asserted
5 Patents, with the full and exclusive right to bring suit to enforce the Asserted Patents,
6 including the right to recover for past damages.

7 53. The Asserted Patents are valid and enforceable under the United States
8 Patent Laws.

9

BoA's Accused Products

10 54. Through its Bank of America Mobile Banking application, BoA offers its mobile check deposit feature to its customers, including individuals and business. 11 On information and belief, BoA controls and operates various computers, servers, 12 13 software, and other infrastructure that operates and supports its Mobile Banking application and mobile check deposit feature. The Bank of America Mobile Banking 14 application, its mobile check deposit feature, and the computers, servers, software, 15 and other infrastructure related to the Bank of America Mobile Banking application 16 and its mobile check deposit feature are referred to herein as the "BoA Accused 17 18 Products."

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BoA's Knowledge of the Asserted Patents Prior to This Case

20 55. On information and belief, BoA had knowledge of each of the Asserted
21 Patents prior to the filing of this Complaint.

22 56. For example, on November 2, 2011, NantWorks notified nine BoA 23 employees, including Matt Calman, that "NantWorks owns patents covering linking 24 objects to content via mobile phones and visual identification, including image recognition, barcodes, QR codes, other symbols, optical character recognition, and 25 augmented reality" and specifically identified, among others, the '529 and '252 26 27 patents as patents that "cover capturing an image of an object, identifying the object 28 based on image/object recognition, barcode, or symbol recognition, providing an Case No 2.20-cv-7872-GW-PVC

information address related to the object, and accessing information at that address." 1 2 BoA was thus well aware of these patents and their applicability to their and their 3 customers' use of their mobile check deposit feature. In fact, BoA cited the same patents that NantWorks identified on November 2, 2011 during the prosecution of 4 patents BoA was pursuing at that time relating to their mobile check deposit feature. 5 Specifically, BoA cited these patents in an Information Disclosure Statement for a 6 7 patent application naming Matt Calman as an inventor submitted to the United States 8 Patent and Trademark Office on January 1, 2012 – just two months after NantWorks informed Mr. Calman and others at BoA of its patents. Thus, Mr. Calman - a Senior 9 10 Vice President and Research and Development Executive at BoA who was involved 11 in developing new banking applications – was well aware of these patents and their applicability to BoA's mobile check deposit solution. 12

- 13 57. In October 2016, NantWorks informed BoA of all of the asserted patents, including the '529 and '252 patents it had previously identified to BoA on November 14 2, 2011 as well as additional NantWorks patents from the same family of image 15 recognition patents that issued after November 2, 2011. Those patents included the 16 '038, '030, '036, '897, '278, and '004 patents. As a result, BoA had knowledge of 17 18 each of the Asserted Patents by October 2016, and knowledge that each of the Asserted Patents, including the '529 and '252 patents that it had been aware of since 19 at least 2011, were applicable to BoA's mobile check deposit solution. 20
- 58. On July 23, 2018, representatives for NantWorks met with
 representatives for BoA to present the issues of BoA's misappropriation of
 NantWorks' intellectual property and BoA's breaches of its prior agreements. At that
 time NantWorks made BoA aware of its infringement of various patents within
 NantWorks' patent portfolio directed to computer image recognition, including the
 '252 and '004 patents.
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NantWorks' Attempts to Resolve This Dispute

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litigation. Specifically, NantWorks scheduled and attended several in-person
 meetings with BoA to discuss BoA's unlawful misappropriation and use of
 NantWorks' intellectual property and BoA's breaches of its contractual obligations.
 Despite NantWorks' efforts to reach an amicable resolution, the parties were unable
 to reach a resolution.

6 60. Through this litigation, NantWorks seeks redress for the harm caused by
7 BoA's unlawful use of NantWorks' intellectual property and BoA's breach of its
8 contractual obligations.

COUNT I:

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Infringement of United States Patent No. 7,881,529

11 61. NantWorks re-alleges and incorporates by reference the allegations of12 the preceding paragraphs of this Complaint as if fully set forth herein.

62. In violation of 35 U.S.C. § 271, BoA has infringed and is currently
infringing, directly and/or through intermediaries, the '529 patent by making, using,
selling, offering for sale, and/or importing into the United States, without authority,
the BoA Accused Products that practice at least claim 1 of the '529 patent. The BoA
Accused Products meet each and every element this claim. BoA has infringed and is
currently infringing this claim literally and/or under the doctrine of equivalents.

63. Exemplary claim 1 of the '529 patent states:

20 1. A system comprising:

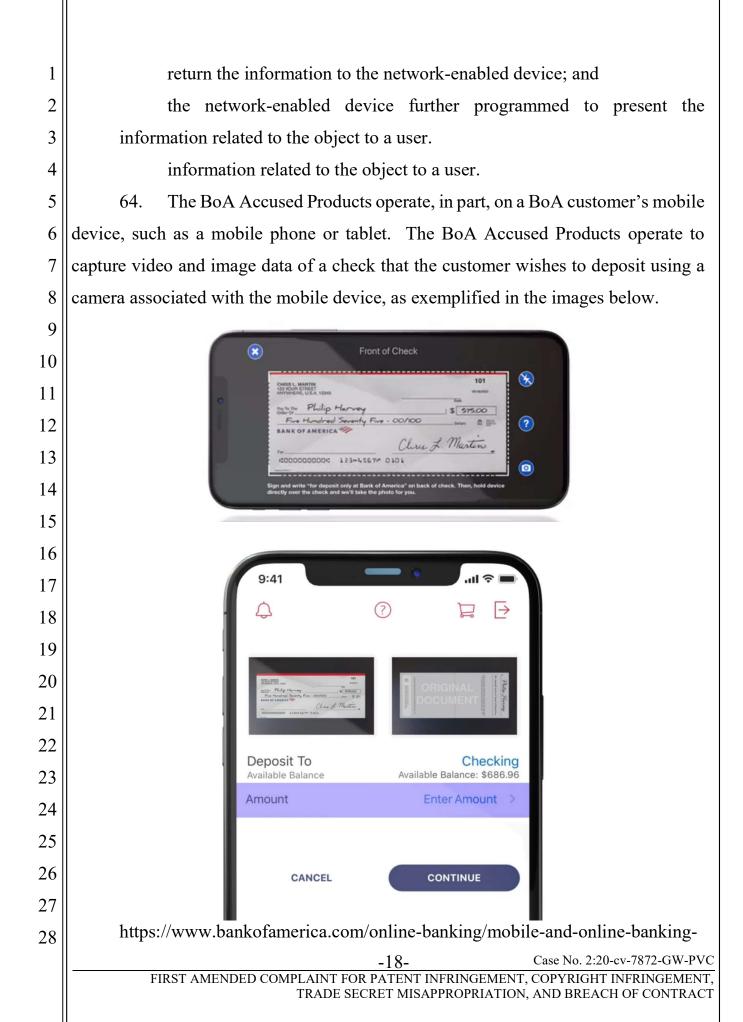
a camera that captures an image;

a network-enabled device that conducts a data processing operation on at least a portion of the image to produce data, and sends the data to a service;

the service programmed to receive the data; identify an object within the
image;

26 distinguish an object present in the image from others using a database
27 that stores data characteristics of target objects; associate the object with
28 information; and

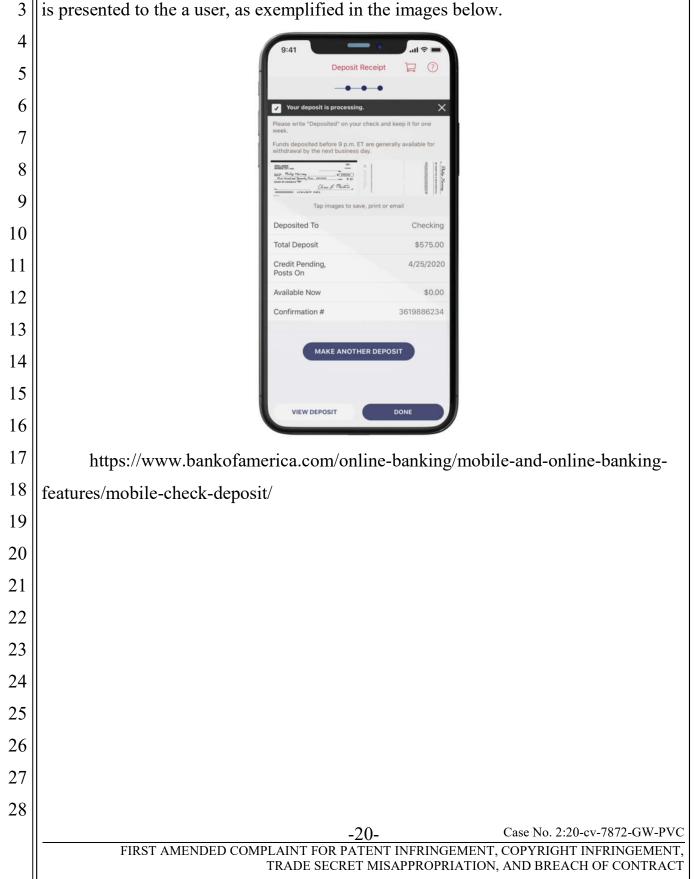
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1 || features/mobile-check-deposit/

65. On information and belief, the BoA Accused Products operate to identify
an object within the captured video/image data and distinguish the object present in
the video/image from others based on features of the object in the captured
video/image. For example, on information and belief, the BoA Accused Products
identify and distinguish the specific type of the check, as described in the below
image, as well as components thereof, such as writing, signatures, and alphanumeric
characters.

9 What types of checks are accepted with Mobile Check Deposit? We only accept checks from a U.S. financial institution, in U.S. dollars.³ The following items are eligible for 10 mobile deposit · Personal checks 11 Business checks · Government/treasury checks · Cashier's checks 12 Please visit a financial center to deposit the following items which are currently not accepted via mobile deposit 13 . U.S. savings bonds · Checks from foreign banks 14 · Money orders · Traveler's checks Image Replacement Documents (IRDs) 15 · Third-party checks · Checks not payable in U.S. dollars 16 https://www.bankofamerica.com/online-banking/mobile-check-deposit-faqs/ 17 BoA's Accused Products perform validation and verification of the 66. 18 captured check image and perform a check deposit transaction with the BoA 19 customer's checking account, as described in the image below. 20When will my funds be available? 21 Deposits are subject to verification and funds will not be available immediately. Once the deposit has been 22 received, you'll be able to view the pending transaction online or on your phone. Checks received by the applicable cutoff time on a business day are usually available in your account the next business day. 23 https://www.bankofamerica.com/online-banking/mobile-check-deposit-faqs/ 24 67. On information and belief. BoA's Accused Products associate identified 25 objects from the captured check image with relevant information associated with the 26 captured check, including, for example, information concerning monetary amount and 27 parties associated with the check, authorization and validity of the check, the date and 28 Case No. 2:20-cv-7872-GW-PVC -19-FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT, COPYRIGHT INFRINGEMENT, TRADE SECRET MISAPPROPRIATION, AND BREACH OF CONTRACT status of the checking transaction, and a confirmation number. BoA's Accused
 Products provide this information to the customer's device, whereon the information
 is presented to the a user, as exemplified in the images below.



| 1 | All Transactions 💌 View Spending & Budgeting |
|----|--|
| 2 | More options 🗹 |
| 3 | Newest Next Previous Oldest Show deals: On ▼ Download Print this view ▼ ▼ Posting Date + Description Type Status Amount |
| 4 | Posting Date + Description Type Status Amount Balance Showing results for [Show all transactions] |
| 5 | O3/20/2018 BKOFAMERICA MOBILE DEPOSIT *MOBILE FL |
| 6 | Edit Description Merchant name: BKOFAMERICA MOBILE 03/20 DEPOSIT *MOBILE |
| 7 | FL Edit Transaction category: Income: Deposits Edit |
| 8 | HILLARY 267 1.1 2000 1.1 |
| 9 | Bankof America |
| 10 | Front view Back view Both sides Print image & details |
| 11 | |
| 12 | \$1.00 |
| 13 | 68. On information and belief, BoA has had actual knowledge of its |
| 14 | infringement of the '529 patent since November 2, 2011, but no later than the filing |
| 15 | date of this Complaint. |
| 16 | 69. On information and belief, BoA had actual knowledge of its and its |
| 17 | customers' infringement of the '529 patent or was willfully blind thereto as of the |
| 18 | issue date of the '529 patent. For example: |
| 19 | • NantWorks and BoA collaborated closely as part of BoA's evaluation of |
| 20 | NantWorks' computer image recognition technologies. |
| 21 | • As part of their relationship, NantWorks made BoA aware of |
| 22 | NantWorks' patent portfolio covering computer image recognition and |
| 23 | processing, including the '529 patent. |
| 24 | BoA's patent applications and patents cite the '529 patent and numerous |
| 25 | NantWorks patents in the prosecution family of the '529 patent. |
| 26 | BoA directly and wrongfully appropriated and incorporated NantWorks' |
| 27 | • BoA directly and wrongruny appropriated and incorporated Nantworks confidential image recognition and processing technology into BoA's |
| 28 | mobile check deposit software. On information and belief, BoA knew |
| | -21- Case No. 2:20-cv-7872-GW-PVC |
| | FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT, COPYRIGHT INFRINGEMENT, TRADE SECRET MISAPPROPRIATION, AND BREACH OF CONTRACT |

or had reason to know that NantWorks owned patent rights covering the appropriated technology or that NantWorks would attain patent rights covering those technologies.

Notwithstanding BoA's actual notice of infringement, BoA has provided 70. 4 5 and continues to provide the BoA Accused Products to its customers that make or use the BoA Accused Products with knowledge of or willful blindness to the fact that its 6 actions will induce others, including those customers, to directly infringe the '529 7 8 patent. BoA induces others including its customers to infringe the '529 patent in 9 violation of 35 U.S.C. § 271(b) by encouraging and facilitating others to perform actions that BoA knows to be acts of infringement of the '529 patent with intent that 10 those performing the acts infringe the '529 patent, or with willful blindness to such 11 12 facts. On information and belief, BoA, directly and/or through intermediaries, 13 advertises and distributes the BoA Accused Products, publishes instruction materials, specifications and promotional literature describing the operation of the BoA Accused 14 Products, and offers technical assistance, training, and/or consulting services 15 regarding the BoA Accused Products to its customers.¹⁰ At least BoA's customers and 16 other end users of these BoA Accused Products then directly infringe the '529 patent 17 by making or using, without NantWorks' authority, the BoA Accused Products. 18

19 71. On information and belief, BoA knows that the BoA Accused Products
20 are especially made or especially adapted for use in the infringement of the '529
21 patent. The infringing components of these products are not staple articles or
22 commodities of commerce suitable for substantial noninfringing use, and the
23 infringing components of these products are a material part of the invention of the
24 '529 patent. Accordingly, in violation of 35 U.S.C. § 271(c), BoA is also contributing

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- See, e.g., https://www.bankofamerica.com/online-banking/mobile-and-online-banking-features/mobile-check-deposit/;
- 28 https://www.bankofamerica.com/online-banking/mobile-check-deposit-faqs/; https://promo.bankofamerica.com/mobile-check-deposit/

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to the direct infringement of the '529 patent by at least its customers and/or end users
 of these BoA Accused Products. The customers and/or end users of these BoA
 Accused Products directly infringe the '529 patent by making or using, without
 NantWorks' authority, the BoA Accused Products.

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72. As a result of BoA's infringement of the '529 patent, NantWorks has suffered, and will continue to suffer, substantial damages. Accordingly, BoA is liable to NantWorks for damages adequate to compensate for BoA's acts of infringement, in an amount to be proved at trial but in no event less than a reasonable royalty for the use made of NantWorks' invention by BoA under 35 U.S.C. § 284.

10 73. In addition, BoA's acts of infringement have caused NantWorks
11 irreparable harm that is not compensable by monetary damages. The hardships that
12 an injunction would impose are less than those faced by NantWorks should an
13 injunction not issue. The public interest would be served by issuance of an injunction.
14 Thus, NantWorks is entitled to a preliminary and a permanent injunction against
15 further infringement. Therefore NantWorks is entitled to injunctive relief under 35
16 U.S.C. § 283.

17 74. BoA's acts of infringement constitute willful, egregious misconduct, and
18 consequently NantWorks is entitled to a discretionary increase of its damages award
19 up to three times the amount found or assessed, costs, and attorney's fees under 35
20 U.S.C. § 284.

75. Based on the foregoing facts, NantWorks requests that this Court declare
this an exceptional case, and award Plaintiffs their costs and attorney's fees under 35
U.S.C. § 285.

<u>COUNT II:</u>

Infringement of United States Patent No. 7,899,252

76. NantWorks re-alleges and incorporates by reference the allegations of
the preceding paragraphs of this Complaint as if fully set forth herein.

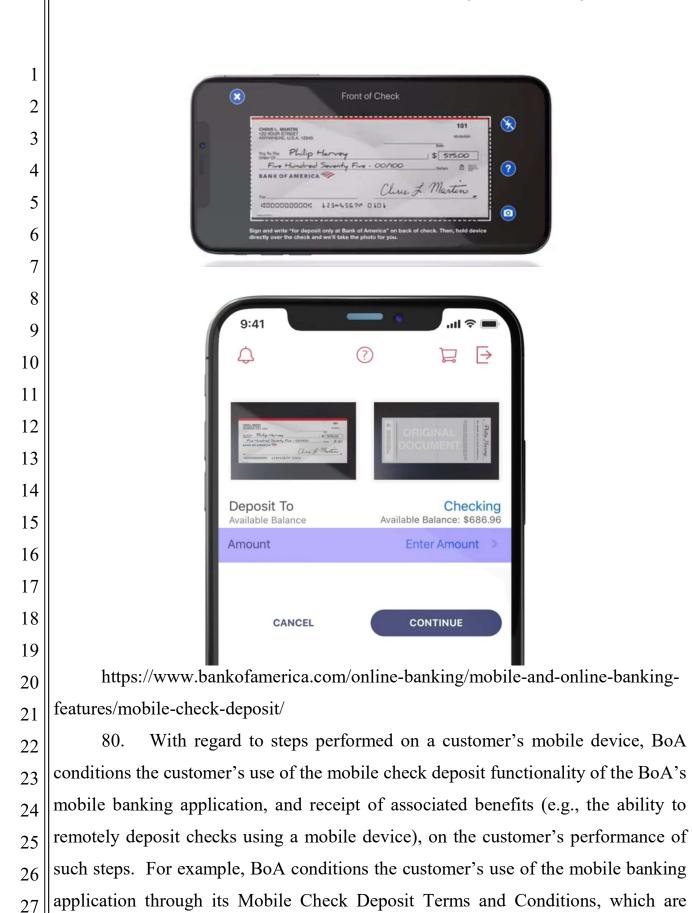
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77. In violation of 35 U.S.C. § 271, BoA has infringed and is currently <u>-23</u>- Case No. 2:20-cv-7872-GW-PVC

infringing, directly and/or through intermediaries, the '252 patent by making, using, 1 selling, offering for sale, and/or importing into the United States, without authority, 2 the BoA Accused Products that practice at least claim 18 of the '252 patent. The BoA 3 Accused Products meet each and every element this claim. BoA has infringed and is 4 5 currently infringing this claim literally and/or under the doctrine of equivalents. Exemplary claim 18 of the '252 patent states: 78. 6 18. A method for retrieving information from image processing, the 7 8 method comprising: 9 providing a mobile device having a camera the mobile device configured to capture an image and configured to transmit data relating to the image an 10 image processing platform; 11 configuring the image processing platform to receive the data relating to 12 the image and to conduct image processing, including: 13 operating on the data relating to the image to determine if the image 14 15 contains one or more recognizable symbols; and decoding the recognizable symbols to extract symbol information by 16 analyzing the recognizable symbols according to type; 17 18 providing access to a distal server configured to use a database to identify pertinent information associated with the recognizable symbols based on the 19 symbol information; and 20 allowing the mobile device to receive the pertinent information over a 21 22 network. 23 79. The BoA Accused Products operate, in part, on a BoA customer's mobile device, such as a mobile phone or tablet. The BoA Accused Products operate to 24 capture video and image data of a check that the customer wishes to deposit using a 25 camera associated with the mobile device, as exemplified in the images below. 26 27 28 Case No. 2:20-cv-7872



 $\frac{2}{28}$ provided to each customer upon the customer's enrollment to the BoA mobile banking

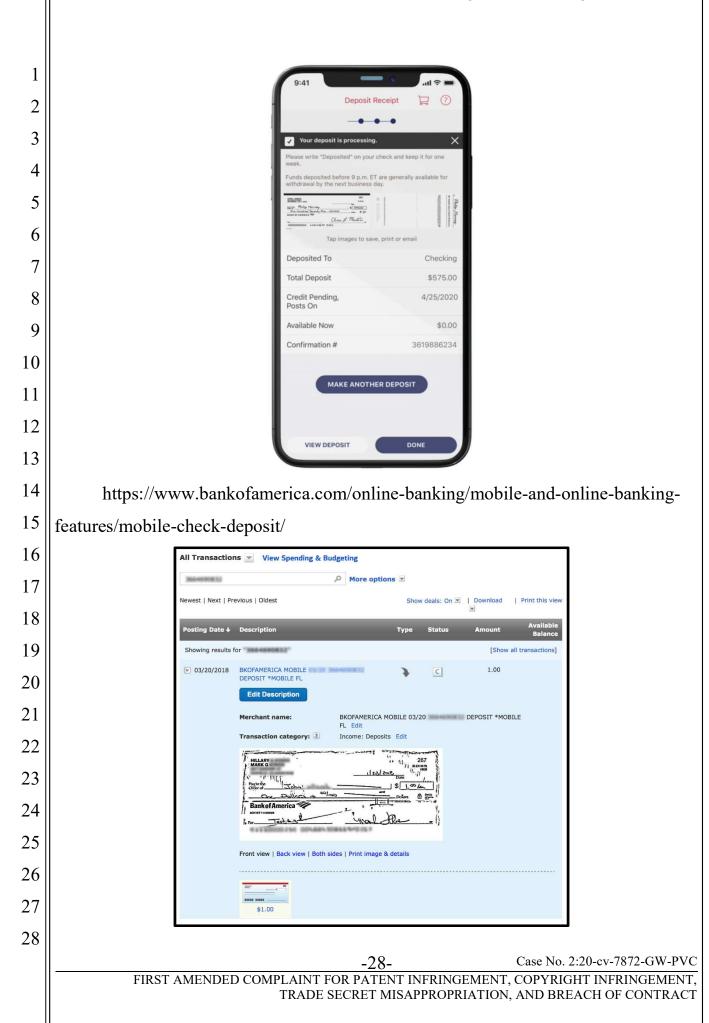
application, and which the customer must accept in order to utilize the application. 1 The Mobile Check Deposit Terms and Conditions dictate the hardware and software 2 3 to be utilized by the customer and dictates the responsibilities of a customer with regard to capturing an image of a check using a camera-enabled mobile device and 4 transferring such an image to BoA for image processing. The customer's use of the 5 mobile banking application is further conditioned due to the design and functionality 6 of the BoA Accused Products. For example, actions performed at a customer's mobile 7 device, such as capturing an image of a check and transferring such an image are 8 necessary technological prerequisites in the customer's participation in BoA's mobile 9 deposit services. BoA also establishes the manner and timing of performance by 10 which a customer utilizes the BoA mobile banking application to perform mobile 11 check deposits. BoA establishes such manner and timing of performance through its 12 13 Mobile Check Deposit Terms and Conditions and through BoA's design of the functionality of the BoA mobile banking application, as described in this paragraph. 14 BoA further establishes the manner and timing of its customers' performance by 15 providing detailed, step-by-step instructions for a customer to perform to perform 16 certain steps at the customer's mobile device to perform a mobile check deposit and 17 receive the associated benefits of BoA's mobile banking services. 18 See e.g., 19 https://www.bankofamerica.com/online-banking/mobile-and-online-banking-

20 <u>features/mobile-check-deposit/; https://www.youtube.com/watch?v=-cGT_khFQsQ</u>.

81. On information and belief, the BoA Accused Products operate to identify
an object within the captured video/image data and distinguish the object present in
the video/image from others based on features of the object in the captured
video/image. For example, on information and belief, the BoA Accused Products
identify and distinguish the specific type of the check, as described in the below
image, as well as components thereof, such as writing, signatures, and alphanumeric
characters.

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| Case 2 | 20-cv-07872-GW-PVC Document 40 Filed 11/11/20 Page 28 of 86 Page ID #:406 |
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| | |
| 1 | ✓ What types of checks are accepted with Mobile Check Deposit? |
| 2 | We only accept checks from a U.S. financial institution, in U.S. dollars. ³ The following items are eligible for mobile deposit: |
| 3 | Personal checks |
| | Business checks Government/treasury checks Government/treasury checks |
| 4 | Cashier's checks Please visit a financial center to deposit the following items which are currently not accepted via mobile deposit: |
| 5 | U.S. savings bondsChecks from foreign banks |
| 6 | Money orders Traveler's checks |
| 7 | Image Replacement Documents (IRDs)Third-party checks |
| 8 | Checks not payable in U.S. dollars |
| 9 | https://www.bankofamerica.com/online-banking/mobile-check-deposit-faqs/ |
| 10 | 82. BoA's Accused Products perform validation and verification of the |
| 11 | captured check image and perform a check deposit transaction with the BoA |
| 12 | customer's checking account, as described in the image below. |
| 13 | ✓ When will my funds be available? |
| 14 | Deposits are subject to verification and funds will not be available immediately. Once the deposit has been received, you'll be able to view the pending transaction online or on your phone. Checks received by the |
| 15 | applicable cutoff time on a business day are usually available in your account the next business day. |
| 16 | https://www.bankofamerica.com/online-banking/mobile-check-deposit-faqs/ |
| 17 | 83. On information and belief, BoA's Accused Products associate identified |
| 18 | objects from the captured check image with relevant information associated with the |
| 19 | captured check, including, for example, information concerning monetary amount and |
| 20 | parties associated with the check, authorization and validity of the check, the date and |
| 21 | status of the checking transaction, and a confirmation number. BoA's Accused |
| 22 | Products provide this information to the customer's device, whereon the information |
| 23 | is presented to the a user, as exemplified in the images below. |
| 24 | |
| 25 | |
| 26 | |
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| 28 | |
| | -27- Case No. 2:20-cv-7872-GW-PVC |
| | FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT, COPYRIGHT INFRINGEMENT, TRADE SECRET MISAPPROPRIATION, AND BREACH OF CONTRACT |



84. On information and belief, BoA has had actual knowledge of its
 infringement of the '252 patent since November 2, 2011, but no later than the filing
 date of this Complaint.

4 85. On information and belief, BoA had actual knowledge of its and its
5 customers' infringement of the '252 patent or was willfully blind thereto as of the
6 issue date of the '252 patent. For example:

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- NantWorks and BoA collaborated closely as part of BoA's evaluation of NantWorks' computer image recognition technologies.
- As part of their relationship, NantWorks made BoA aware of NantWorks' patent portfolio covering computer image recognition and processing, including the '252 patent.
- BoA's patent applications and patents cite the '252 patent and numerous
 NantWorks patents in the prosecution family of the '252 patent.
- BoA directly and wrongfully appropriated and incorporated NantWorks'
 confidential image recognition and processing technology into BoA's
 mobile check deposit software. On information and belief, BoA knew
 or had reason to know that NantWorks owned patent rights covering the
 appropriated technology or that NantWorks would attain patent rights
 covering those technologies.

Notwithstanding BoA's actual notice of infringement, BoA has provided 20 86. and continues to provide the BoA Accused Products to its customers that make or use 21 22 the BoA Accused Products with knowledge of or willful blindness to the fact that its 23 actions will induce others, including those customers, to directly infringe the '252 24 patent. BoA induces others including its customers to infringe the '252 patent in violation of 35 U.S.C. § 271(b) by encouraging and facilitating others to perform 25 actions that BoA knows to be acts of infringement of the '252 patent with intent that 26 those performing the acts infringe the '252 patent, or with willful blindness to such 27 On information and belief, BoA, directly and/or through intermediaries, 28 facts. Case No. 2:20-cv-7872-GW-PVC

advertises and distributes the BoA Accused Products, publishes instruction materials, 1 specifications and promotional literature describing the operation of the BoA Accused 2 Products, and offers technical assistance, training, and/or consulting services 3 regarding the BoA Accused Products to its customers.¹¹ At least BoA's customers and 4 5 other end users of these BoA Accused Products then directly infringe the '252 patent by making or using, without NantWorks' authority, the BoA Accused Products. 6

On information and belief, BoA knows that the BoA Accused Products 7 87. 8 are especially made or especially adapted for use in the infringement of the '252 9 patent. The infringing components of these products are not staple articles or 10 commodities of commerce suitable for substantial noninfringing use, and the infringing components of these products are a material part of the invention of the 11 '252 patent. Accordingly, in violation of 35 U.S.C. § 271(c), BoA is also contributing 12 13 to the direct infringement of the '252 patent by at least its customers and/or end users of these BoA Accused Products. The customers and/or end users of these BoA 14 Accused Products directly infringe the '252 patent by making or using, without 15 16 NantWorks' authority, the BoA Accused Products.

- As a result of BoA's infringement of the '252 patent, NantWorks has 17 88. suffered, and will continue to suffer, substantial damages. Accordingly, BoA is liable 18 19 to NantWorks for damages adequate to compensate for BoA's acts of infringement, in an amount to be proved at trial but in no event less than a reasonable royalty for the 20 21 use made of NantWorks' invention by BoA under 35 U.S.C. § 284.
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In addition, BoA's acts of infringement have caused NantWorks 89. 23 irreparable harm that is not compensable by monetary damages. The hardships that 24 an injunction would impose are less than those faced by NantWorks should an

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- 26 See, e.g., https://www.bankofamerica.com/online-banking/mobile-andonline-banking-features/mobile-check-deposit/; 27
- https://www.bankofamerica.com/online-banking/mobile-check-deposit-faqs/; 28 https://promo.bankofamerica.com/mobile-check-deposit/

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injunction not issue. The public interest would be served by issuance of an injunction.
 Thus, NantWorks is entitled to a preliminary and a permanent injunction against
 further infringement. Therefore NantWorks is entitled to injunctive relief under 35
 U.S.C. § 283.

90. BoA's acts of infringement constitute willful, egregious misconduct, and
consequently NantWorks is entitled to a discretionary increase of its damages award
up to three times the amount found or assessed, costs, and attorney's fees under 35
U.S.C. § 284.

9 91. Based on the foregoing facts, NantWorks requests that this Court declare
10 this an exceptional case, and award Plaintiffs their costs and attorney's fees under 35
11 U.S.C. § 285.

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<u>COUNT III:</u>

Infringement of United States Patent No. 8,326,038

14 92. NantWorks re-alleges and incorporates by reference the allegations of15 the preceding paragraphs of this Complaint as if fully set forth herein.

16 93. In violation of 35 U.S.C. § 271, BoA has infringed and is currently
17 infringing, directly and/or through intermediaries, the '038 patent by making, using,
18 selling, offering for sale, and/or importing into the United States, without authority,
19 the BoA Accused Products that practice at least claim 1 of the '038 patent. The BoA
20 Accused Products meet each and every element this claim. BoA has infringed and is
21 currently infringing this claim literally and/or under the doctrine of equivalents.

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94. Exemplary claim 1 of the '038 patent states:

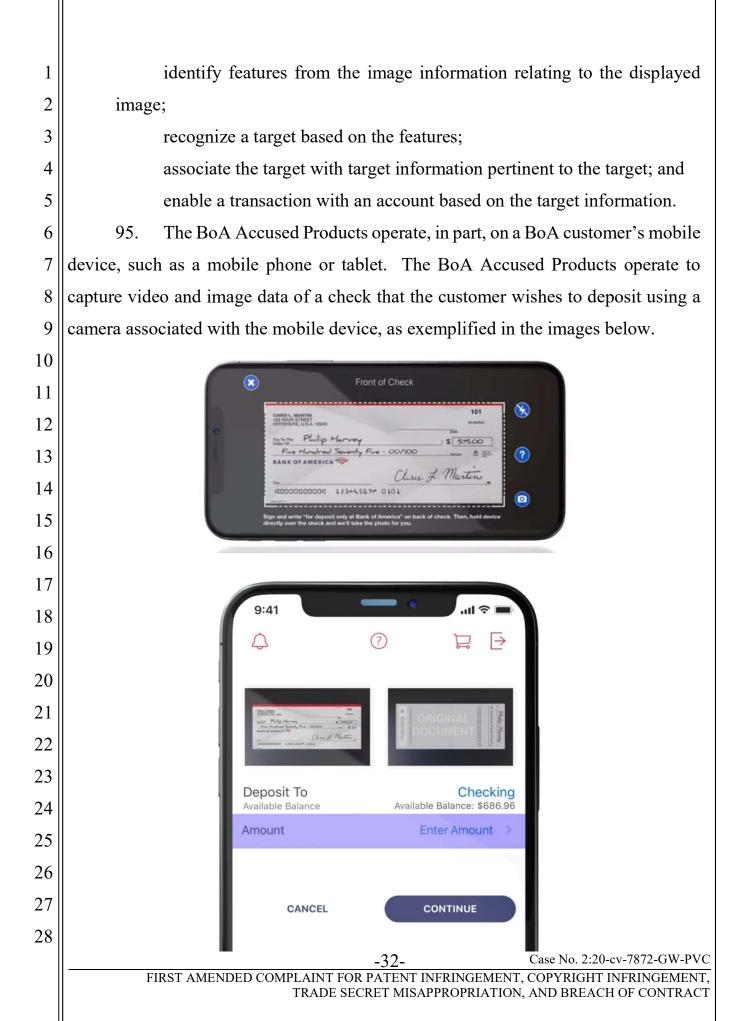
1. An interactive system comprising:

an optical sensor capable of capturing image information from a
displayed image on a portable device display screen; and

an image processing platform coupled with the optical sensor and
configured to:

-31-

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https://www.bankofamerica.com/online-banking/mobile-and-online-banking-1 features/mobile-check-deposit/ 2

96. 3 On information and belief, the BoA Accused Products operate to identify an object within the captured video/image data and distinguish the object present in 4 the video/image from others based on features of the object in the captured 5 video/image. For example, on information and belief, the BoA Accused Products 6 identify and distinguish the specific type of the check, as described in the below 7 8 image, as well as components thereof, such as writing, signatures, and alphanumeric 9 || characters.

| 10 | ✓ What types of checks are accepted with Mobile Check Deposit? |
|----|---|
| 11 | We only accept checks from a U.S. financial institution, in U.S. dollars. ³ The following items are eligible for mobile deposit: |
| 10 | Personal checks |
| 12 | Business checks Government/treasury checks |
| 13 | Cashier's checks |
| | Please visit a financial center to deposit the following items which are currently not accepted via mobile deposit: |
| 14 | • U.S. savings bonds |
| 15 | Checks from foreign banks |
| 13 | Money orders Traveler's checks |
| 10 | Image Replacement Documents (IRDs) |
| 16 | Third-party checks |
| 17 | Checks not payable in U.S. dollars |
| 17 | |
| 18 | https://www.bankofamerica.com/online-banking/mobile-check-deposit-faqs/ |
| 19 | 97. BoA's Accused Products perform validation and verification of the |
| 20 | captured check image and perform a check deposit transaction with the BoA |
| 21 | customer's checking account, as described in the image below. |
| 22 | ✓ When will my funds be available? |
| | Deposits are subject to verification and funds will not be available immediately. Once the deposit has been |
| 23 | received, you'll be able to view the pending transaction online or on your phone. Checks received by the |
| 24 | applicable cutoff time on a business day are usually available in your account the next business day. |
| 24 | |
| 25 | https://www.bankofamerica.com/online-banking/mobile-check-deposit-faqs/ |
| 26 | 98. On information and belief, BoA's Accused Products associate identified |
| 27 | objects from the captured check image with relevant information associated with the |
| 27 | sejees nem ne explaited encer mage with relevant information associated with the |
| 28 | captured check, including, for example, information concerning monetary amount and |
| | -33- Case No. 2:20-cv-7872-GW-PVC |
| | FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT, COPYRIGHT INFRINGEMENT, TRADE SECRET MISAPPROPRIATION, AND BREACH OF CONTRACT |
| | |

parties associated with the check, authorization and validity of the check, the date and
 status of the checking transaction, and a confirmation number. BoA's Accused
 Products provide this information to the customer's device, whereon the information
 is presented to the a user, as exemplified in the images below.

| 5 | 9:41 |
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| 6 | Deposit Receipt 📮 🕜 |
| 7 | Your deposit is processing. |
| , | Your deposit is processing. Please write "Deposited" on your check and keep it for one week. |
| 8 | Funds deposited before 9 p.m. ET are generally available for withdrawal by the next business day. |
| 9 | The The American Strength and American Stren |
| 10 | Tap images to save, print or email |
| 11 | Deposited To Checking |
| 12 | Total Deposit \$575.00 Credit Pending, 4/25/2020 |
| 13 | Posts On Available Now \$0.00 |
| | Confirmation # 3619886234 |
| 14 | MAKE ANOTHER DEPOSIT |
| 15 | |
| 16 | |
| 17 | VIEW DEPOSIT DONE |
| 18 | https://www.bankofamerica.com/online-banking/mobile-and-online-banking- |
| 19 | features/mobile-check-deposit/ |
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| 28 | -34- Case No. 2:20-cv-7872-GW-PVC FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT, COPYRIGHT INFRINGEMENT, |
| 28 | -34- Case No. 2:20-cv-7872-GW-PVC FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT, COPYRIGHT INFRINGEMENT, TRADE SECRET MISAPPROPRIATION, AND BREACH OF CONTRACT |

| 1 | All Transactions 💌 View Spending & Budgeting |
|----|--|
| 2 | More options 🗹 |
| 3 | Newest Next Previous Oldest Show deals: On I Download Print this view |
| 4 | Posting Date + Description Type Status Amount Balance Showing results for [Show all transactions] |
| 5 | O3/20/2018 BKOFAMERICA MOBILE DEPOSIT *MOBILE FL C 1.00 C 1.00 C C |
| 6 | Edit Description Merchant name: BKOFAMERICA MOBILE 03/20 DEPOSIT *MOBILE |
| 7 | FL Edit Transaction category: Income: Deposits Edit |
| 8 | HILLARY HIL |
| 9 | Bankof America 20100 - 20100 0 m 1 |
| 10 | Front view Back view Both sides Print image & details |
| 11 | |
| 12 | \$1.00 |
| 13 | 99. On information and belief, BoA has had actual knowledge of its |
| 14 | infringement of the '038 patent since October 2016, but no later than the filing date |
| 15 | of this Complaint. |
| 16 | 100. On information and belief, BoA had actual knowledge of its and its |
| 17 | customers' infringement of the '038 patent or was willfully blind thereto as of the |
| 18 | issue date of the '038 patent. For example: |
| 19 | • NantWorks and BoA collaborated closely as part of BoA's evaluation of |
| 20 | NantWorks' computer image recognition technologies. |
| 21 | • As part of their relationship, NantWorks made BoA aware of |
| 22 | NantWorks' patent portfolio covering computer image recognition and |
| 23 | processing. |
| 24 | BoA's patent applications and patents cite numerous NantWorks patents |
| 25 | in the prosecution family of the '038 patent. |
| 26 | BoA directly and wrongfully appropriated and incorporated NantWorks' |
| 27 | confidential image recognition and processing technology into BoA's |
| 28 | mobile check deposit software. On information and belief, BoA knew |
| | -35- Case No. 2:20-cv-7872-GW-PVC FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT, COPYRIGHT INFRINGEMENT, TRADE SECRET MISAPPROPRIATION, AND BREACH OF CONTRACT |

or had reason to know that NantWorks owned patent rights covering the appropriated technology or that NantWorks would attain patent rights covering those technologies.

101. Notwithstanding BoA's actual notice of infringement, BoA has provided 4 5 and continues to provide the BoA Accused Products to its customers that make or use the BoA Accused Products with knowledge of or willful blindness to the fact that its 6 actions will induce others, including those customers, to directly infringe the '038 7 8 patent. BoA induces others including its customers to infringe the '038 patent in 9 violation of 35 U.S.C. § 271(b) by encouraging and facilitating others to perform actions that BoA knows to be acts of infringement of the '038 patent with intent that 10 those performing the acts infringe the '038 patent, or with willful blindness to such 11 12 facts. On information and belief, BoA, directly and/or through intermediaries, 13 advertises and distributes the BoA Accused Products, publishes instruction materials, specifications and promotional literature describing the operation of the BoA Accused 14 Products, and offers technical assistance, training, and/or consulting services 15 regarding the BoA Accused Products to its customers.¹² At least BoA's customers and 16 17 other end users of these BoA Accused Products then directly infringe the '038 patent by making or using, without NantWorks' authority, the BoA Accused Products. 18

19 102. On information and belief, BoA knows that the BoA Accused Products
20 are especially made or especially adapted for use in the infringement of the '038
21 patent. The infringing components of these products are not staple articles or
22 commodities of commerce suitable for substantial noninfringing use, and the
23 infringing components of these products are a material part of the invention of the
24 '038 patent. Accordingly, in violation of 35 U.S.C. § 271(c), BoA is also contributing

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 ¹² See, e.g., https://www.bankofamerica.com/online-banking/mobile-and-online-banking-features/mobile-check-deposit/;
- 28 https://www.bankofamerica.com/online-banking/mobile-check-deposit-faqs/; https://promo.bankofamerica.com/mobile-check-deposit/

to the direct infringement of the '038 patent by at least its customers and/or end users
 of these BoA Accused Products. The customers and/or end users of these BoA
 Accused Products directly infringe the '038 patent by making or using, without
 NantWorks' authority, the BoA Accused Products.

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103. As a result of BoA's infringement of the '038 patent, NantWorks has suffered, and will continue to suffer, substantial damages. Accordingly, BoA is liable to NantWorks for damages adequate to compensate for BoA's acts of infringement, in an amount to be proved at trial but in no event less than a reasonable royalty for the use made of NantWorks' invention by BoA under 35 U.S.C. § 284.

10 104. In addition, BoA's acts of infringement have caused NantWorks
irreparable harm that is not compensable by monetary damages. The hardships that
an injunction would impose are less than those faced by NantWorks should an
injunction not issue. The public interest would be served by issuance of an injunction.
Thus, NantWorks is entitled to a preliminary and a permanent injunction against
further infringement. Therefore NantWorks is entitled to injunctive relief under 35
U.S.C. § 283.

17 105. BoA's acts of infringement constitute willful, egregious misconduct, and
18 consequently NantWorks is entitled to a discretionary increase of its damages award
19 up to three times the amount found or assessed, costs, and attorney's fees under 35
20 U.S.C. § 284.

21 106. Based on the foregoing facts, NantWorks requests that this Court declare
22 this an exceptional case, and award Plaintiffs their costs and attorney's fees under 35
23 U.S.C. § 285.

COUNT IV:

Infringement of United States Patent No. 8,463,030

26 107. NantWorks re-alleges and incorporates by reference the allegations of
27 the preceding paragraphs of this Complaint as if fully set forth herein.

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| 108. | In violation | of 35 | U.S.C. | § 271, | BoA h | as infi | ringed | and | is cu | rrently | у |
|------|--------------|-------------|---------|--------|-------|---------|--------------|----------|---------|-----------|------|
| | | | | -37- | | | Case No | . 2:20-0 | ev-7872 | 2-GW-PV | VC |
| - | | a a l (DI) | DIE DOD | | | | ~ ~ PI / P / | OTTO T | | ~ F1 (F1) | 1.00 |

FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT, COPYRIGHT INFRINGEMENT, TRADE SECRET MISAPPROPRIATION, AND BREACH OF CONTRACT

infringing, directly and/or through intermediaries, the '030 patent by making, using, 1 selling, offering for sale, and/or importing into the United States, without authority, 2 the BoA Accused Products that practice at least claim 1 of the '030 patent. The BoA 3 Accused Products meet each and every element this claim. BoA has infringed and is 4 5 currently infringing this claim literally and/or under the doctrine of equivalents.

109. Exemplary claim 1 of the '030 patent states:

1. A transaction system comprising:

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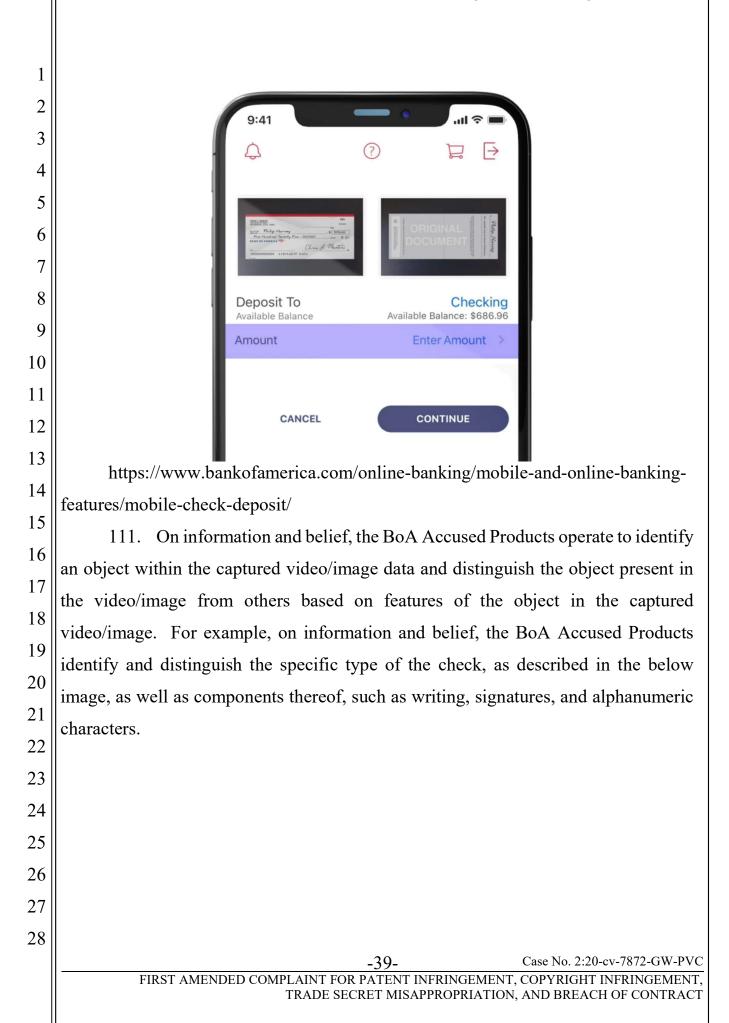
a mobile device configured to acquire data related to an object;

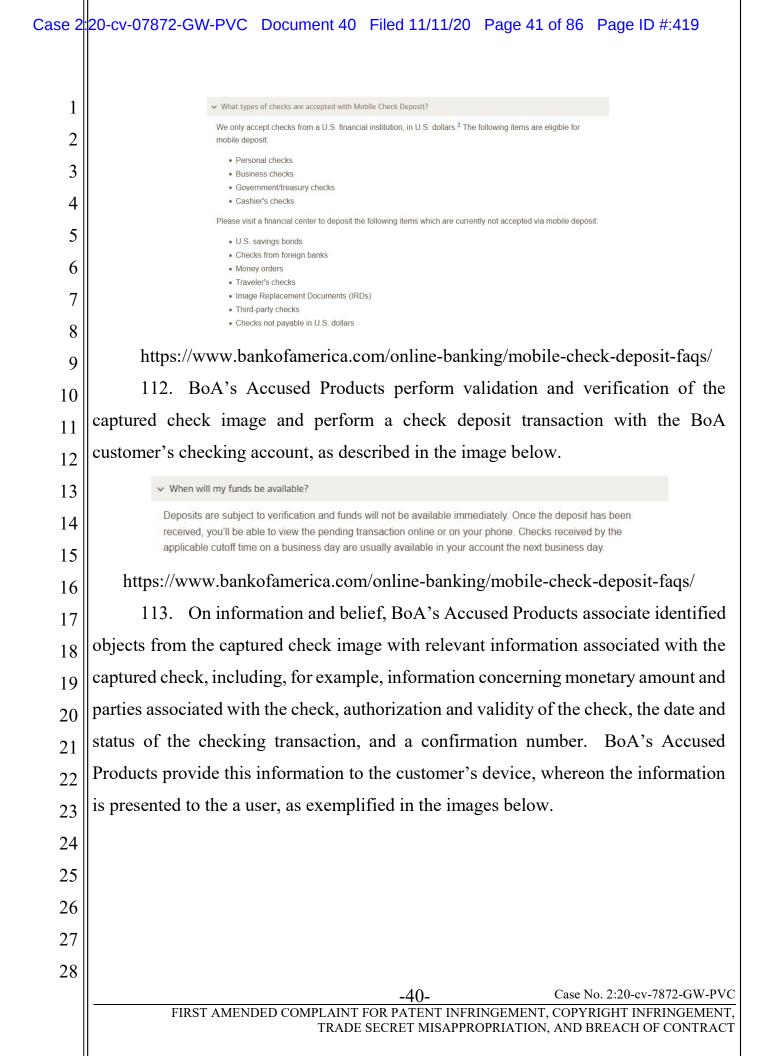
an object identification platform configured to obtain the acquired data, 9 recognize the object as a target object based on the acquired data, and determine 10 object information associated with the target object; and

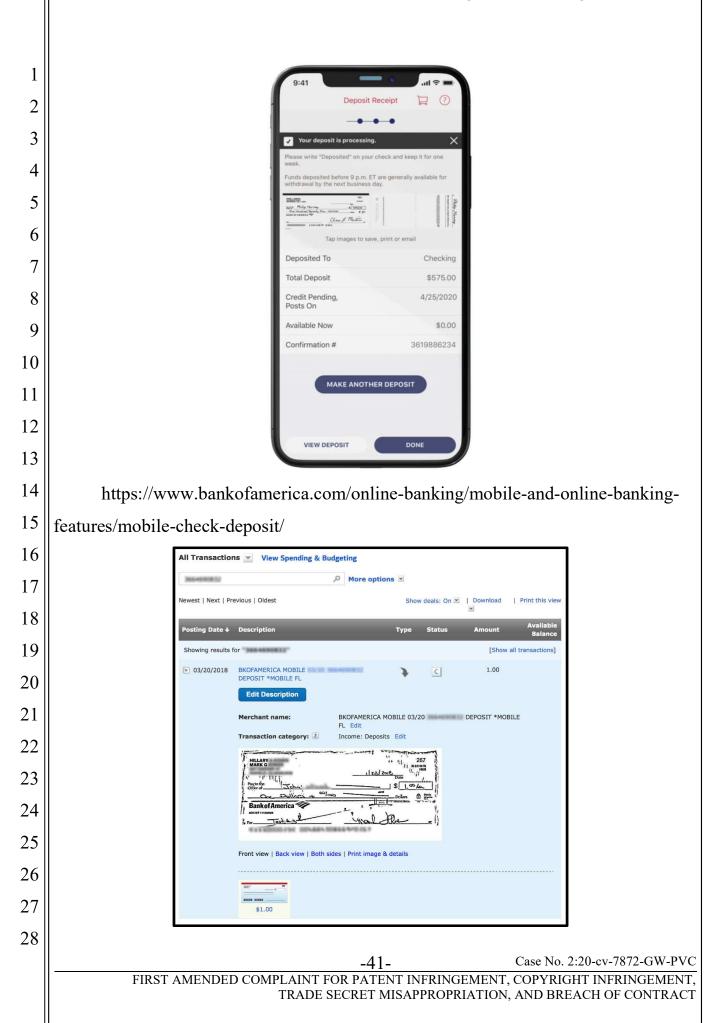
a content platform configured to obtain the object information, and 12 13 initiate a transaction associated with the target object with a selected account over a network based on the object information. 14

110. The BoA Accused Products operate, in part, on a BoA customer's mobile 15 device, such as a mobile phone or tablet. The BoA Accused Products operate to 16 capture video and image data of a check that the customer wishes to deposit using a 17 18 camera associated with the mobile device, as exemplified in the images below.

> × Front of Check X 101 ? Chry L Martin 0







1 114. On information and belief, BoA has had actual knowledge of its
 2 infringement of the '030 patent since October 2016, but no later than the filing date
 3 of this Complaint.

4 115. On information and belief, BoA had actual knowledge of its and its
5 customers' infringement of the '030 patent or was willfully blind thereto as of the
6 issue date of the '030 patent. For example:

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- NantWorks and BoA collaborated closely as part of BoA's evaluation of NantWorks' computer image recognition technologies.
- As part of their relationship, NantWorks made BoA aware of NantWorks' patent portfolio covering computer image recognition and processing.
- BoA's patent applications and patents cite numerous NantWorks patents
 in the prosecution family of the '030 patent.
- BoA directly and wrongfully appropriated and incorporated NantWorks'
 confidential image recognition and processing technology into BoA's
 mobile check deposit software. On information and belief, BoA knew
 or had reason to know that NantWorks owned patent rights covering the
 appropriated technology or that NantWorks would attain patent rights
 covering those technologies.

116. Notwithstanding BoA's actual notice of infringement, BoA has provided 20 and continues to provide the BoA Accused Products to its customers that make or use 21 22 the BoA Accused Products with knowledge of or willful blindness to the fact that its 23 actions will induce others, including those customers, to directly infringe the '030 patent. BoA induces others including its customers to infringe the '030 patent in 24 violation of 35 U.S.C. § 271(b) by encouraging and facilitating others to perform 25 actions that BoA knows to be acts of infringement of the '030 patent with intent that 26 those performing the acts infringe the '030 patent, or with willful blindness to such 27 On information and belief, BoA, directly and/or through intermediaries, 28 facts. Case No. 2:20-cv-7872-GW-PVC

advertises and distributes the BoA Accused Products, publishes instruction materials, 1 specifications and promotional literature describing the operation of the BoA Accused 2 Products, and offers technical assistance, training, and/or consulting services 3 regarding the BoA Accused Products to its customers.¹³ At least BoA's customers and 4 5 other end users of these BoA Accused Products then directly infringe the '030 patent by making or using, without NantWorks' authority, the BoA Accused Products. 6

7 117. On information and belief, BoA knows that the BoA Accused Products 8 are especially made or especially adapted for use in the infringement of the '030 9 patent. The infringing components of these products are not staple articles or commodities of commerce suitable for substantial noninfringing use, and the 10 infringing components of these products are a material part of the invention of the 11 '030 patent. Accordingly, in violation of 35 U.S.C. § 271(c), BoA is also contributing 12 13 to the direct infringement of the '030 patent by at least its customers and/or end users of these BoA Accused Products. The customers and/or end users of these BoA 14 Accused Products directly infringe the '030 patent by making or using, without 15 NantWorks' authority, the BoA Accused Products.

16 17

118. As a result of BoA's infringement of the '030 patent, NantWorks has suffered, and will continue to suffer, substantial damages. Accordingly, BoA is liable 18 19 to NantWorks for damages adequate to compensate for BoA's acts of infringement, in an amount to be proved at trial but in no event less than a reasonable royalty for the 20 21 use made of NantWorks' invention by BoA under 35 U.S.C. § 284.

22

119. In addition, BoA's acts of infringement have caused NantWorks 23 irreparable harm that is not compensable by monetary damages. The hardships that 24 an injunction would impose are less than those faced by NantWorks should an

- 25
- 26 See, e.g., https://www.bankofamerica.com/online-banking/mobile-andonline-banking-features/mobile-check-deposit/; 27
- https://www.bankofamerica.com/online-banking/mobile-check-deposit-faqs/; 28 https://promo.bankofamerica.com/mobile-check-deposit/

injunction not issue. The public interest would be served by issuance of an injunction.
 Thus, NantWorks is entitled to a preliminary and a permanent injunction against
 further infringement. Therefore NantWorks is entitled to injunctive relief under 35
 U.S.C. § 283.

5 120. BoA's acts of infringement constitute willful, egregious misconduct, and
6 consequently NantWorks is entitled to a discretionary increase of its damages award
7 up to three times the amount found or assessed, costs, and attorney's fees under 35
8 U.S.C. § 284.

9 121. Based on the foregoing facts, NantWorks requests that this Court declare
10 this an exceptional case, and award Plaintiffs their costs and attorney's fees under 35
11 U.S.C. § 285.

COUNT V:

Infringement of United States Patent No. 8,478,036

14 122. NantWorks re-alleges and incorporates by reference the allegations of15 the preceding paragraphs of this Complaint as if fully set forth herein.

16 123. In violation of 35 U.S.C. § 271, BoA has infringed and is currently
infringing, directly and/or through intermediaries, the '036 patent by making, using,
selling, offering for sale, and/or importing into the United States, without authority,
the BoA Accused Products that practice at least claim 1 of the '036 patent. The BoA
Accused Products meet each and every element this claim. BoA has infringed and is
currently infringing this claim literally and/or under the doctrine of equivalents.

124. Exemplary claim 1 of the '036 patent states:

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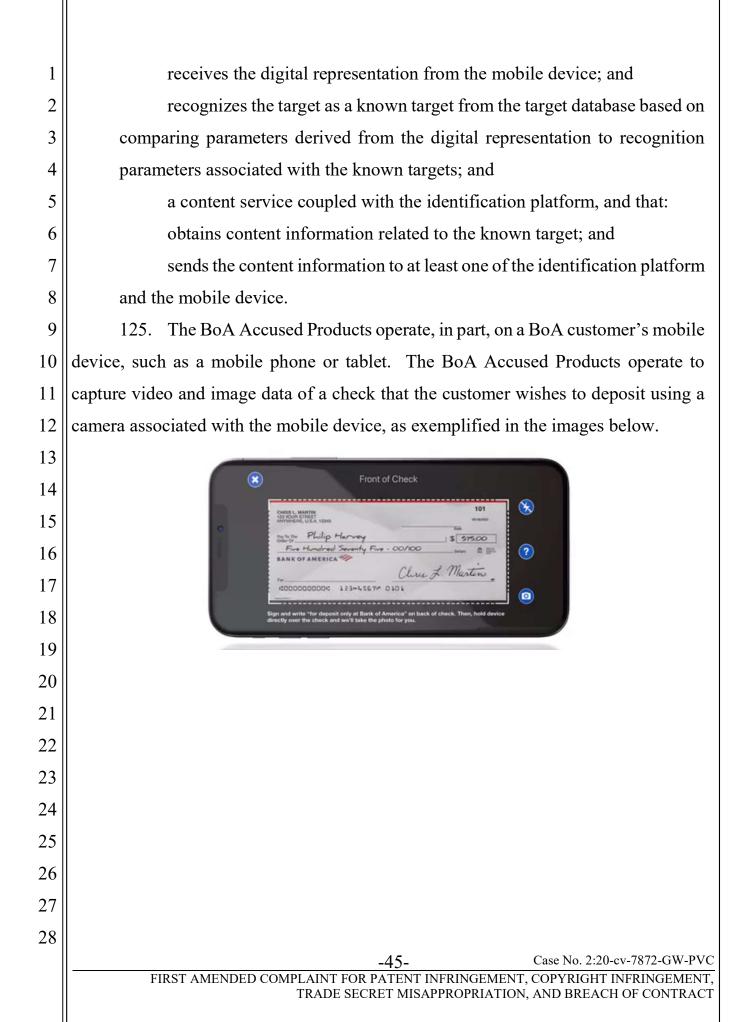
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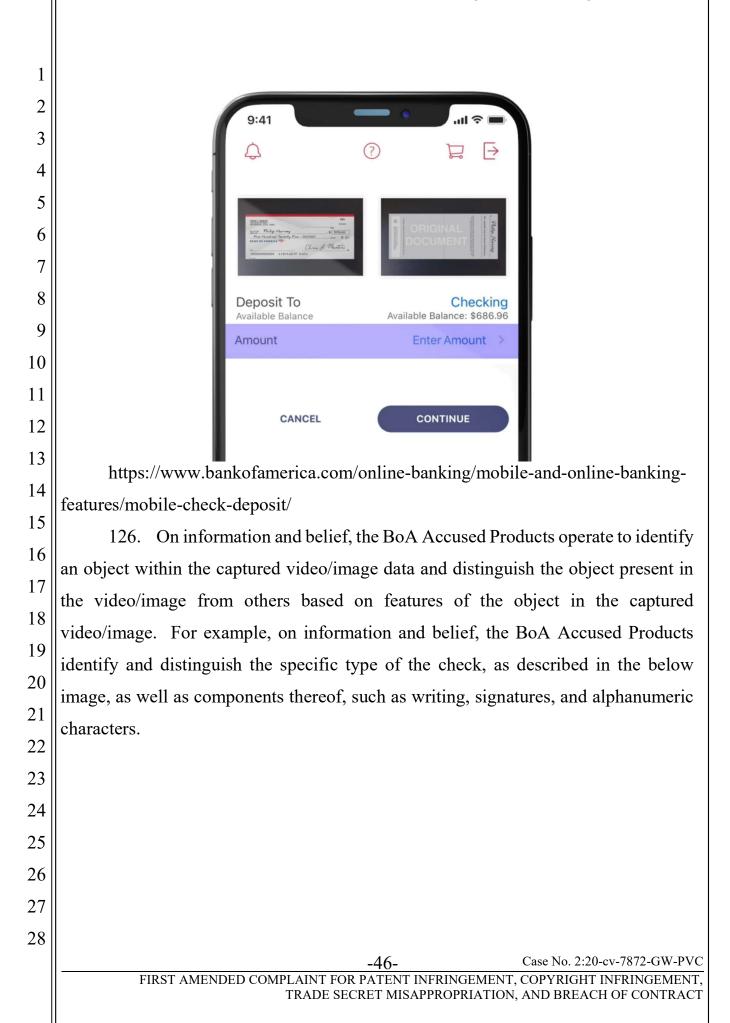
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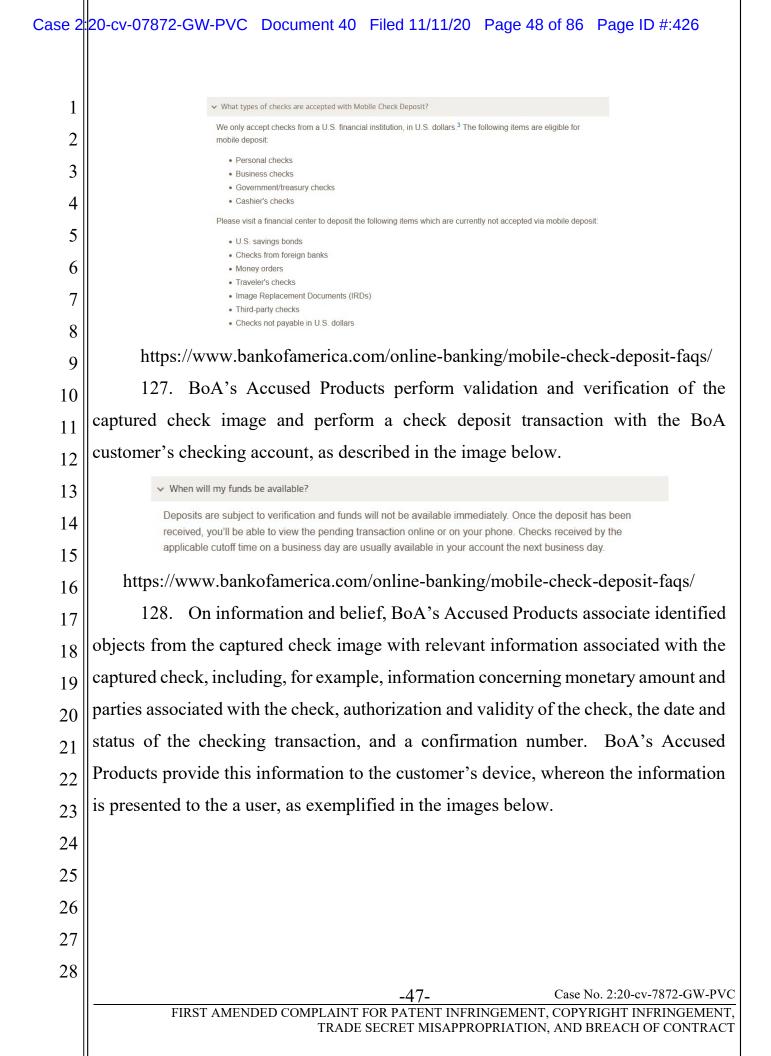
1. A content provisioning system comprising:

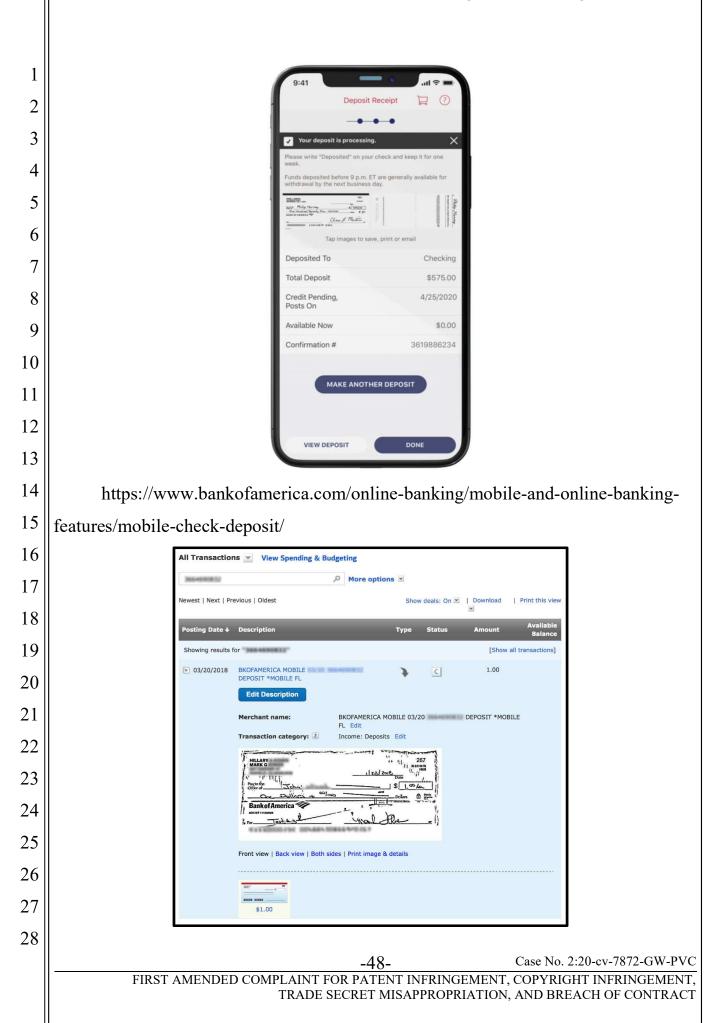
a target database storing known targets of different types and recognition
parameters associated with the known targets;

an identification platform coupled with the target database, and that:
communicates with a mobile device capable of acquiring a digital
representation of a scene containing at least a portion of a target;









1 129. On information and belief, BoA has had actual knowledge of its
 2 infringement of the '036 patent since October 2016, but no later than the filing date
 3 of this Complaint..

4 130. On information and belief, BoA had actual knowledge of its and its
5 customers' infringement of the '036 patent or was willfully blind thereto as of the
6 issue date of the '036 patent. For example:

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- NantWorks and BoA collaborated closely as part of BoA's evaluation of NantWorks' computer image recognition technologies.
- As part of their relationship, NantWorks made BoA aware of NantWorks' patent portfolio covering computer image recognition and processing.
- BoA's patent applications and patents cite numerous NantWorks patents
 in the prosecution family of the '036 patent.
- BoA directly and wrongfully appropriated and incorporated NantWorks'
 confidential image recognition and processing technology into BoA's
 mobile check deposit software. On information and belief, BoA knew
 or had reason to know that NantWorks owned patent rights covering the
 appropriated technology or that NantWorks would attain patent rights
 covering those technologies.

131. Notwithstanding BoA's actual notice of infringement, BoA has provided 20 and continues to provide the BoA Accused Products to its customers that make or use 21 22 the BoA Accused Products with knowledge of or willful blindness to the fact that its 23 actions will induce others, including those customers, to directly infringe the '036 patent. BoA induces others including its customers to infringe the '036 patent in 24 violation of 35 U.S.C. § 271(b) by encouraging and facilitating others to perform 25 actions that BoA knows to be acts of infringement of the '036 patent with intent that 26 those performing the acts infringe the '036 patent, or with willful blindness to such 27 On information and belief, BoA, directly and/or through intermediaries, 28 facts. Case No. 2:20-cv-7872-GW-PVC

advertises and distributes the BoA Accused Products, publishes instruction materials, 1 specifications and promotional literature describing the operation of the BoA Accused 2 Products, and offers technical assistance, training, and/or consulting services 3 regarding the BoA Accused Products to its customers.¹⁴ At least BoA's customers and 4 5 other end users of these BoA Accused Products then directly infringe the '036 patent by making or using, without NantWorks' authority, the BoA Accused Products. 6

7 132. On information and belief, BoA knows that the BoA Accused Products 8 are especially made or especially adapted for use in the infringement of the '036 9 patent. The infringing components of these products are not staple articles or commodities of commerce suitable for substantial noninfringing use, and the 10 infringing components of these products are a material part of the invention of the 11 '036 patent. Accordingly, in violation of 35 U.S.C. § 271(c), BoA is also contributing 12 13 to the direct infringement of the '036 patent by at least its customers and/or end users of these BoA Accused Products. The customers and/or end users of these BoA 14 Accused Products directly infringe the '036 patent by making or using, without 15 16 NantWorks' authority, the BoA Accused Products.

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133. As a result of BoA's infringement of the '036 patent, NantWorks has suffered, and will continue to suffer, substantial damages. Accordingly, BoA is liable 18 19 to NantWorks for damages adequate to compensate for BoA's acts of infringement, in an amount to be proved at trial but in no event less than a reasonable royalty for the 20 21 use made of NantWorks' invention by BoA under 35 U.S.C. § 284.

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134. In addition, BoA's acts of infringement have caused NantWorks 23 irreparable harm that is not compensable by monetary damages. The hardships that 24 an injunction would impose are less than those faced by NantWorks should an

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26 See, e.g., https://www.bankofamerica.com/online-banking/mobile-andonline-banking-features/mobile-check-deposit/; 27

https://www.bankofamerica.com/online-banking/mobile-check-deposit-faqs/; 28 https://promo.bankofamerica.com/mobile-check-deposit/

injunction not issue. The public interest would be served by issuance of an injunction.
 Thus, NantWorks is entitled to a preliminary and a permanent injunction against
 further infringement. Therefore NantWorks is entitled to injunctive relief under 35
 U.S.C. § 283.

5 135. BoA's acts of infringement constitute willful, egregious misconduct, and
6 consequently NantWorks is entitled to a discretionary increase of its damages award
7 up to three times the amount found or assessed, costs, and attorney's fees under 35
8 U.S.C. § 284.

9 136. Based on the foregoing facts, NantWorks requests that this Court declare
10 this an exceptional case, and award Plaintiffs their costs and attorney's fees under 35
11 U.S.C. § 285.

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Infringement of United States Patent No. 8,520,897

COUNT VI:

14 137. NantWorks re-alleges and incorporates by reference the allegations of15 the preceding paragraphs of this Complaint as if fully set forth herein.

16 138. In violation of 35 U.S.C. § 271, BoA has infringed and is currently
infringing, directly and/or through intermediaries, the '897 patent by making, using,
selling, offering for sale, and/or importing into the United States, without authority,
the BoA Accused Products that practice at least claim 25 of the '897 patent. The BoA
Accused Products meet each and every element this claim. BoA has infringed and is
currently infringing this claim literally and/or under the doctrine of equivalents.

22 ||

139. Exemplary claim 25 of the '897 patent states:

23 25. A method of conducting a transaction with an interactive system, the
24 method comprising

25 providing access to a device having a display;

26 displaying a displayed image on the display of the device;

27 presenting the displayed image proximate to an optical sensor; and

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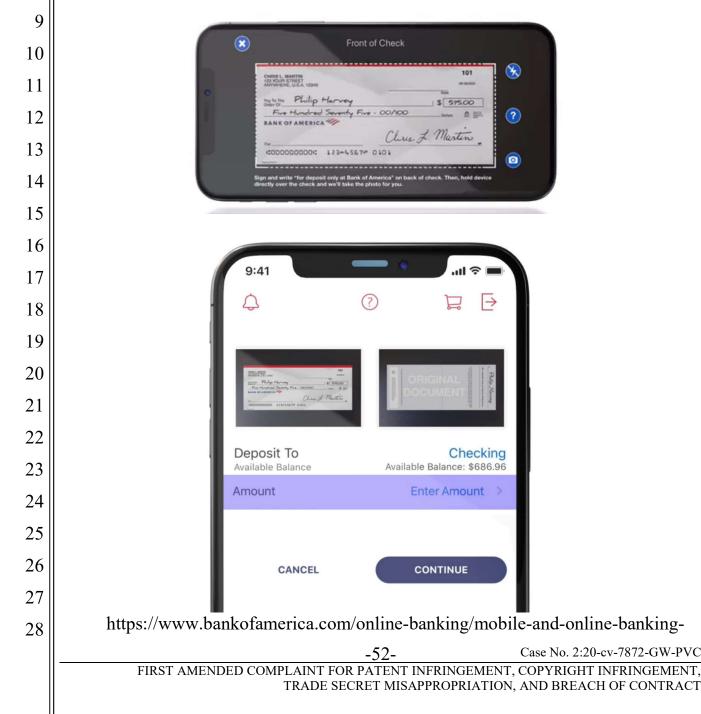
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enabling, via the interactive system, identification of features from the displayed image, recognition of a target based on the features, association of the target with target information pertinent to the target, and performance of a transaction based on the target information.

5 140. The BoA Accused Products operate, in part, on a BoA customer's mobile
6 device, such as a mobile phone or tablet. The BoA Accused Products operate to
7 capture video and image data of a check that the customer wishes to deposit using a
8 camera associated with the mobile device, as exemplified in the images below.



1 || features/mobile-check-deposit/

2 141. With regard to steps performed on a customer's mobile device, BoA 3 conditions the customer's use of the mobile check deposit functionality of the BoA's mobile banking application, and receipt of associated benefits (e.g., the ability to 4 5 remotely deposit checks using a mobile device), on the customer's performance of such steps. For example, BoA conditions the customer's use of the mobile banking 6 application through its Mobile Check Deposit Terms and Conditions, which are 7 8 provided to each customer upon the customer's enrollment to the BoA mobile banking application, and which the customer must accept in order to utilize the application. 9 The Mobile Check Deposit Terms and Conditions dictate the hardware and software 10 to be utilized by the customer and dictates the responsibilities of a customer with 11 regard to capturing an image of a check using a camera-enabled mobile device and 12 13 transferring such an image to BoA for image processing. The customer's use of the mobile banking application is further conditioned due to the design and functionality 14 of the BoA Accused Products. For example, actions performed at a customer's mobile 15 device, such as capturing an image of a check and transferring such an image are 16 necessary technological prerequisites in the customer's participation in BoA's mobile 17 deposit services. BoA also establishes the manner and timing of performance by 18 which a customer utilizes the BoA mobile banking application to perform mobile 19 check deposits. BoA establishes such manner and timing of performance through its 2021 Mobile Check Deposit Terms and Conditions and through BoA's design of the 22 functionality of the BoA mobile banking application, as described in this paragraph. 23 BoA further establishes the manner and timing of its customers' performance by providing detailed, step-by-step instructions for a customer to perform to perform 24 certain steps at the customer's mobile device to perform a mobile check deposit and 25 receive the associated benefits of BoA's mobile banking services. 26 See e.g., https://www.bankofamerica.com/online-banking/mobile-and-online-banking-27 28 features/mobile-check-deposit/; https://www.youtube.com/watch?v=-cGT khFQsQ. 53 Case No. 2.20-cv-7872-GW-PVC

> FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT, COPYRIGHT INFRINGEMENT, TRADE SECRET MISAPPROPRIATION, AND BREACH OF CONTRACT

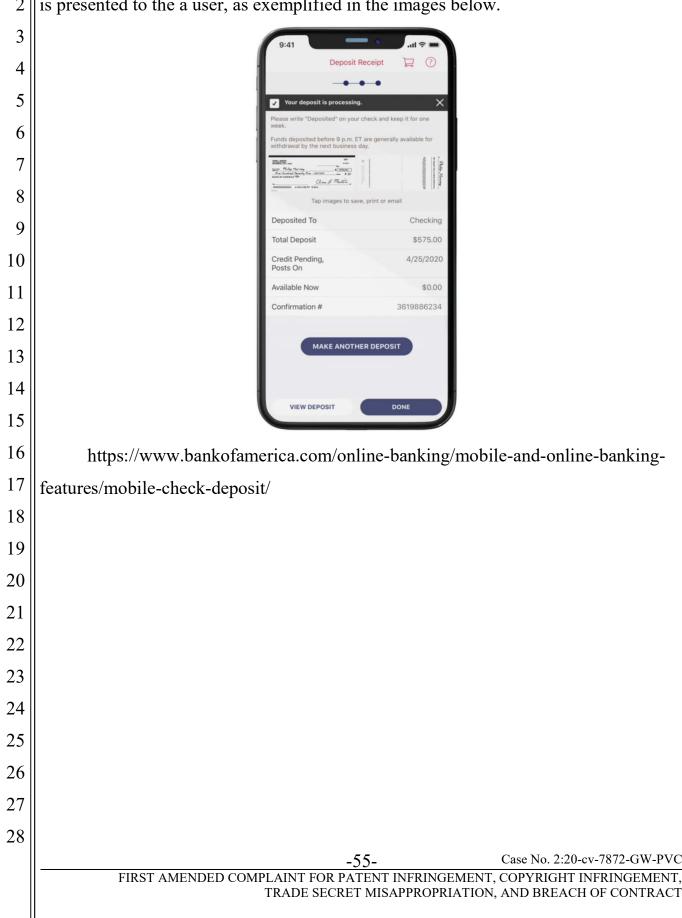
1 142. On information and belief, the BoA Accused Products operate to identify 2 an object within the captured video/image data and distinguish the object present in 3 the video/image from others based on features of the object in the captured 4 video/image. For example, on information and belief, the BoA Accused Products 5 identify and distinguish the specific type of the check, as described in the below 6 image, as well as components thereof, such as writing, signatures, and alphanumeric 7 characters.

8 What types of checks are accepted with Mobile Check Deposit? We only accept checks from a U.S. financial institution, in U.S. dollars.³ The following items are eligible for 9 mobile deposit · Personal checks 10 Business checks · Government/treasury checks 11 · Cashier's checks Please visit a financial center to deposit the following items which are currently not accepted via mobile deposit 12 · U.S. savings bonds · Checks from foreign banks 13 · Money orders · Traveler's checks Image Replacement Documents (IRDs) 14 · Third-party checks · Checks not payable in U.S. dollars 15 https://www.bankofamerica.com/online-banking/mobile-check-deposit-faqs/ 16 143. BoA's Accused Products perform validation and verification of the 17 captured check image and perform a check deposit transaction with the BoA 18 customer's checking account, as described in the image below. 19 20 When will my funds be available? Deposits are subject to verification and funds will not be available immediately. Once the deposit has been 21 received, you'll be able to view the pending transaction online or on your phone. Checks received by the applicable cutoff time on a business day are usually available in your account the next business day. 22 https://www.bankofamerica.com/online-banking/mobile-check-deposit-faqs/ 23 144. On information and belief, BoA's Accused Products associate identified 24 objects from the captured check image with relevant information associated with the 25

26 captured check, including, for example, information concerning monetary amount and

parties associated with the check, authorization and validity of the check, the date and status of the checking transaction, and a confirmation number. BoA's Accused

Products provide this information to the customer's device, whereon the information
 is presented to the a user, as exemplified in the images below.



| 1 | All Transactions 💌 View Spending & Budgeting | | | | | |
|----|---|--|--|--|--|--|
| 2 | More options 🗹 | | | | | |
| 3 | Newest Next Previous Oldest Show deals: On 🖌 Download Print this view | | | | | |
| 4 | Posting Date + Description Type Status Amount Balance Showing results for [Show all transactions] | | | | | |
| 5 | O3/20/2018 BKOFAMERICA MOBILE DEPOSIT *MOBILE FL | | | | | |
| 6 | Edit Description Merchant name: BKOFAMERICA MOBILE 03/20 DEPOSIT *MOBILE | | | | | |
| 7 | FL Edit Transaction category: 2 Income: Deposits Edit | | | | | |
| 8 | HILLARY 1267 MARK G 112Å/2008 Date 111 Protofic 1111 | | | | | |
| 9 | Bankof America | | | | | |
| 10 | tim Tartast Maldla !! | | | | | |
| 11 | Front view Back view Both sides Print image & details | | | | | |
| 12 | | | | | | |
| 12 | | | | | | |
| | 145. On information and belief, BoA has had actual knowledge of its | | | | | |
| 14 | infringement of the '897 patent since October 2016, but no later than the filing date | | | | | |
| 15 | of this Complaint | | | | | |
| 16 | 146. On information and belief, BoA had actual knowledge of its and its | | | | | |
| 17 | customers' infringement of the '897 patent or was willfully blind thereto as of the | | | | | |
| 18 | issue date of the '897 patent. For example: | | | | | |
| 19 | • NantWorks and BoA collaborated closely as part of BoA's evaluation of | | | | | |
| 20 | NantWorks' computer image recognition technologies. | | | | | |
| 21 | • As part of their relationship, NantWorks made BoA aware of | | | | | |
| 22 | NantWorks' patent portfolio covering computer image recognition and | | | | | |
| 23 | processing. | | | | | |
| 24 | • BoA's patent applications and patents cite numerous NantWorks patents | | | | | |
| 25 | in the prosecution family of the '897 patent. | | | | | |
| 26 | • BoA directly and wrongfully appropriated and incorporated NantWorks' | | | | | |
| 27 | confidential image recognition and processing technology into BoA's | | | | | |
| 28 | mobile check deposit software. On information and belief, BoA knew -56- Case No. 2:20-cv-7872-GW-PVC | | | | | |
| | FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT, COPYRIGHT INFRINGEMENT, TRADE SECRET MISAPPROPRIATION, AND BREACH OF CONTRACT | | | | | |

or had reason to know that NantWorks owned patent rights covering the appropriated technology or that NantWorks would attain patent rights covering those technologies.

147. Notwithstanding BoA's actual notice of infringement, BoA has provided 4 5 and continues to provide the BoA Accused Products to its customers that make or use the BoA Accused Products with knowledge of or willful blindness to the fact that its 6 actions will induce others, including those customers, to directly infringe the '897 7 8 patent. BoA induces others including its customers to infringe the '897 patent in 9 violation of 35 U.S.C. § 271(b) by encouraging and facilitating others to perform actions that BoA knows to be acts of infringement of the '897 patent with intent that 10 those performing the acts infringe the '897 patent, or with willful blindness to such 11 12 facts. On information and belief, BoA, directly and/or through intermediaries, 13 advertises and distributes the BoA Accused Products, publishes instruction materials, specifications and promotional literature describing the operation of the BoA Accused 14 Products, and offers technical assistance, training, and/or consulting services 15 regarding the BoA Accused Products to its customers.¹⁵ At least BoA's customers and 16 other end users of these BoA Accused Products then directly infringe the '897 patent 17 by making or using, without NantWorks' authority, the BoA Accused Products. 18

19 148. On information and belief, BoA knows that the BoA Accused Products
20 are especially made or especially adapted for use in the infringement of the '897
21 patent. The infringing components of these products are not staple articles or
22 commodities of commerce suitable for substantial noninfringing use, and the
23 infringing components of these products are a material part of the invention of the
24 '897 patent. Accordingly, in violation of 35 U.S.C. § 271(c), BoA is also contributing

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- See, e.g., https://www.bankofamerica.com/online-banking/mobile-and-online-banking-features/mobile-check-deposit/;
- 28 https://www.bankofamerica.com/online-banking/mobile-check-deposit-faqs/; https://promo.bankofamerica.com/mobile-check-deposit/

to the direct infringement of the '897 patent by at least its customers and/or end users
 of these BoA Accused Products. The customers and/or end of these BoA Accused
 Products directly infringe the '897 patent by making or using, without NantWorks'
 authority, the BoA Accused Products.

149. As a result of BoA's infringement of the '897 patent, NantWorks has
suffered, and will continue to suffer, substantial damages. Accordingly, BoA is liable
to NantWorks for damages adequate to compensate for BoA's acts of infringement,
in an amount to be proved at trial but in no event less than a reasonable royalty for the
use made of NantWorks' invention by BoA under 35 U.S.C. § 284.

10 150. In addition, BoA's acts of infringement have caused NantWorks
11 irreparable harm that is not compensable by monetary damages. The hardships that
12 an injunction would impose are less than those faced by NantWorks should an
13 injunction not issue. The public interest would be served by issuance of an injunction.
14 Thus, NantWorks is entitled to a preliminary and a permanent injunction against
15 further infringement. Therefore NantWorks is entitled to injunctive relief under 35
16 U.S.C. § 283.

17 151. BoA's acts of infringement constitute willful, egregious misconduct, and
18 consequently NantWorks is entitled to a discretionary increase of its damages award
19 up to three times the amount found or assessed, costs, and attorney's fees under 35
20 U.S.C. § 284.

152. Based on the foregoing facts, NantWorks requests that this Court declare
this an exceptional case, and award Plaintiffs their costs and attorney's fees under 35
U.S.C. § 285.

COUNT VII:

Infringement of United States Patent No. 9,031,278

26 153. NantWorks re-alleges and incorporates by reference the allegations of
27 the preceding paragraphs of this Complaint as if fully set forth herein.

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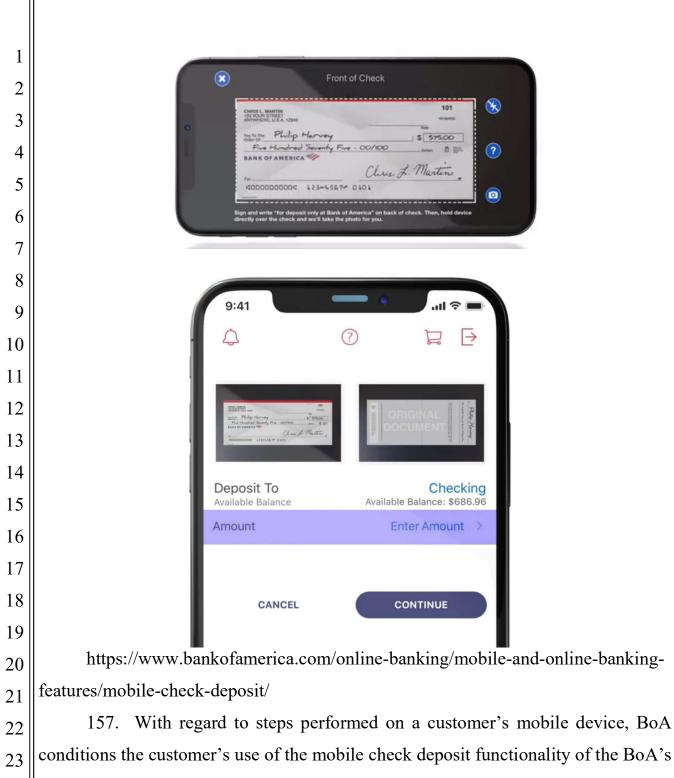
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154. In violation of 35 U.S.C. § 271, BoA has infringed and is currently <u>-58-</u> Case No. 2:20-cv-7872-GW-PVC

FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT, COPYRIGHT INFRINGEMENT, TRADE SECRET MISAPPROPRIATION, AND BREACH OF CONTRACT

infringing, directly and/or through intermediaries, the '278 patent by making, using, 1 selling, offering for sale, and/or importing into the United States, without authority, 2 the BoA Accused Products that practice at least claim 1 of the '278 patent. The BoA 3 Accused Products meet each and every element this claim. BoA has infringed and is 4 5 currently infringing this claim literally and/or under the doctrine of equivalents. 155. Exemplary claim 1 of the '278 patent states: 6 1. A computer-assisted method, comprising: 7 receiving, via a mobile device, an image comprising a representation of 8 9 at least a portion of a document; determining that symbolic content is on the at least the portion of the 10 document based on the image; 11 extracting symbol information based on the symbolic content according 12 13 to symbol type; determining a validity of the document based at least in part on the image 14 and the symbol information; and 15 recognizing the document as a first target object based at least in part on 16 the image, the symbol information, and a query of a database storing target 17 18 object information associated with a plurality of target objects including the 19 first target object; receiving, via an address, first target object information associated with 20 the first target object, wherein the first target object information comprises a 21 response regarding the validity of the document. 22 23 156. The BoA Accused Products operate, in part, on a BoA customer's mobile device, such as a mobile phone or tablet. The BoA Accused Products operate to 24 capture video and image data of a check that the customer wishes to deposit using a 25 camera associated with the mobile device, as exemplified in the images below. 26 27 28 59 Case No. 2:20-cv-7872 FIRST AMENDED COMPLAINT FOR COPVRIG



²³ conditions the customer suse of the moone encert deposit functionality of the Dorr's mobile banking application, and receipt of associated benefits (e.g., the ability to remotely deposit checks using a mobile device), on the customer's performance of such steps. For example, BoA conditions the customer's use of the mobile banking application through its Mobile Check Deposit Terms and Conditions, which are provided to each customer upon the customer's enrollment to the BoA mobile banking

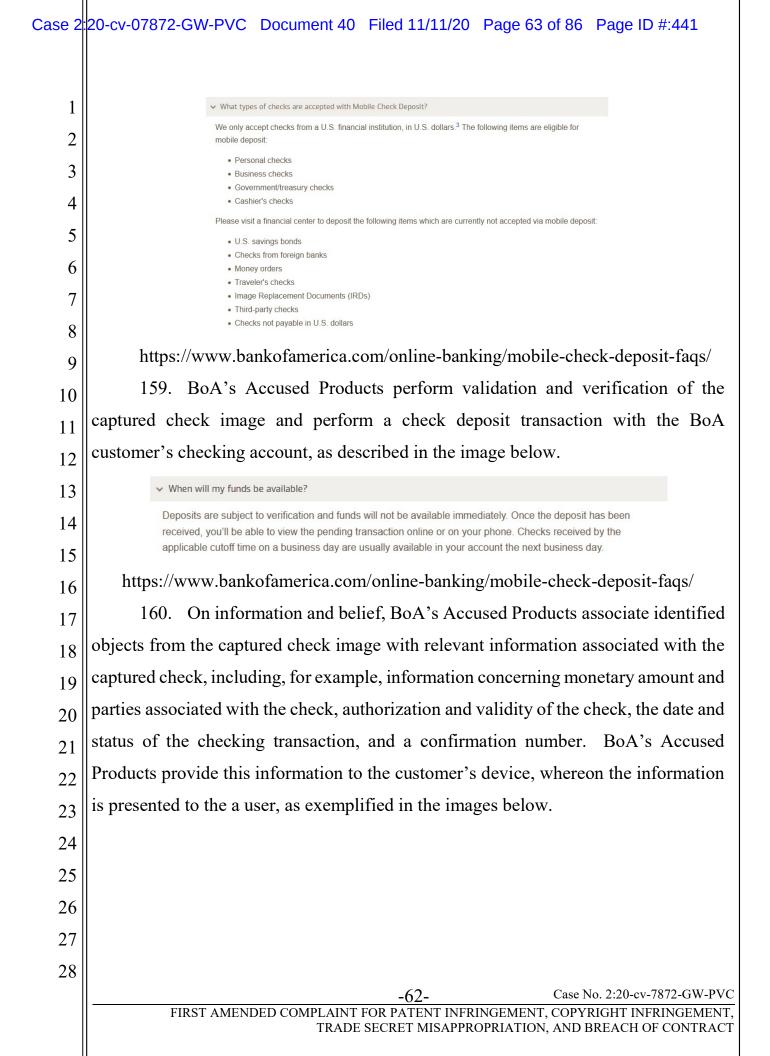
-60- Case No. 2:20-cv-7872-GW-PVC FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT, COPYRIGHT INFRINGEMENT, TRADE SECRET MISAPPROPRIATION, AND BREACH OF CONTRACT

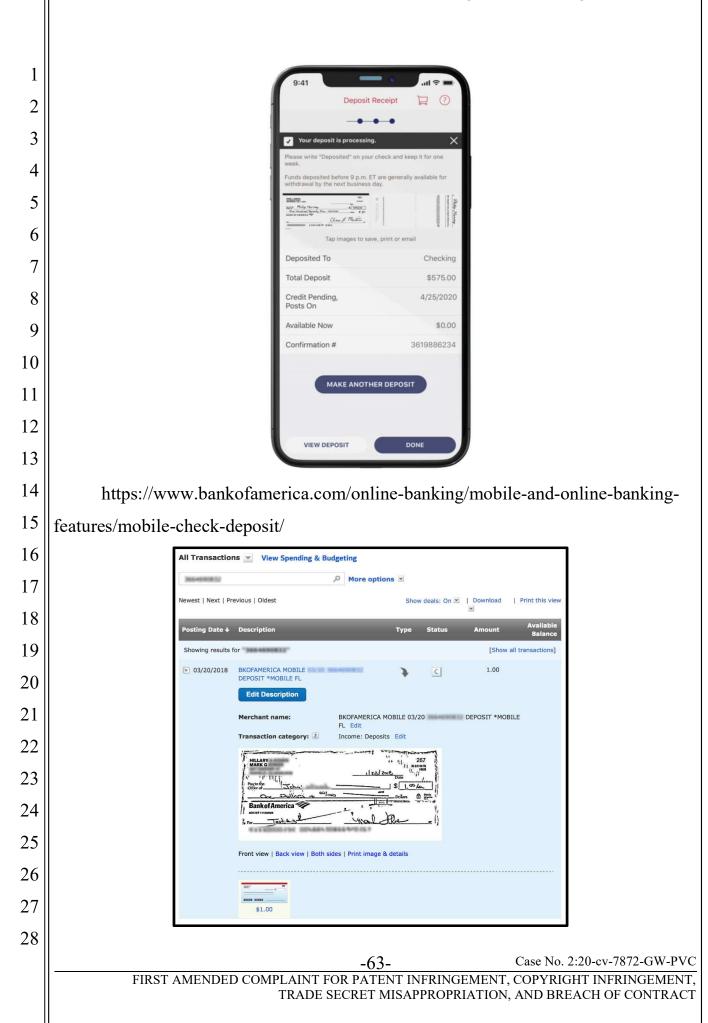
application, and which the customer must accept in order to utilize the application. 1 The Mobile Check Deposit Terms and Conditions dictate the hardware and software 2 3 to be utilized by the customer and dictates the responsibilities of a customer with regard to capturing an image of a check using a camera-enabled mobile device and 4 transferring such an image to BoA for image processing. The customer's use of the 5 mobile banking application is further conditioned due to the design and functionality 6 of the BoA Accused Products. For example, actions performed at a customer's mobile 7 device, such as capturing an image of a check and transferring such an image are 8 necessary technological prerequisites in the customer's participation in BoA's mobile 9 deposit services. BoA also establishes the manner and timing of performance by 10 which a customer utilizes the BoA mobile banking application to perform mobile 11 check deposits. BoA establishes such manner and timing of performance through its 12 13 Mobile Check Deposit Terms and Conditions and through BoA's design of the functionality of the BoA mobile banking application, as described in this paragraph. 14 BoA further establishes the manner and timing of its customers' performance by 15 providing detailed, step-by-step instructions for a customer to perform to perform 16 certain steps at the customer's mobile device to perform a mobile check deposit and 17 receive the associated benefits of BoA's mobile banking services. 18 See e.g., 19 https://www.bankofamerica.com/online-banking/mobile-and-online-banking-

20 <u>features/mobile-check-deposit/; https://www.youtube.com/watch?v=-cGT_khFQsQ</u>.

158. On information and belief, the BoA Accused Products operate to identify
an object within the captured video/image data and distinguish the object present in
the video/image from others based on features of the object in the captured
video/image. For example, on information and belief, the BoA Accused Products
identify and distinguish the specific type of the check, as described in the below
image, as well as components thereof, such as writing, signatures, and alphanumeric
characters.

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1 161. On information and belief, BoA has had actual knowledge of its
 2 infringement of the '278 patent since October 2016, but no later than the filing date
 3 of this Complaint..

4 162. On information and belief, had actual knowledge of its and its customers'
5 infringement of the '278 patent or was willfully blind thereto as of the issue date of
6 the '278 patent. For example:

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- NantWorks and BoA collaborated closely as part of BoA's evaluation of NantWorks' computer image recognition technologies.
- As part of their relationship, NantWorks made BoA aware of NantWorks' patent portfolio covering computer image recognition and processing.
- BoA's patent applications and patents cite numerous NantWorks patents
 in the prosecution family of the '278 patent.
- BoA directly and wrongfully appropriated and incorporated NantWorks'
 confidential image recognition and processing technology into BoA's
 mobile check deposit software. On information and belief, BoA knew
 or had reason to know that NantWorks owned patent rights covering the
 appropriated technology or that NantWorks would attain patent rights
 covering those technologies.

163. Notwithstanding BoA's actual notice of infringement, BoA has provided 20 and continues to provide the BoA Accused Products to its customers that make or use 21 22 the BoA Accused Products with knowledge of or willful blindness to the fact that its 23 actions will induce others, including those customers, to directly infringe the '278 patent. BoA induces others including its customers to infringe the '278 patent in 24 violation of 35 U.S.C. § 271(b) by encouraging and facilitating others to perform 25 actions that BoA knows to be acts of infringement of the '278 patent with intent that 26 those performing the acts infringe the '278 patent, or with willful blindness to such 27 On information and belief, BoA, directly and/or through intermediaries, 28 facts. Case No. 2:20-cv-7872-GW-PVC advertises and distributes the BoA Accused Products, publishes instruction materials,
 specifications and promotional literature describing the operation of the BoA Accused
 Products, and offers technical assistance, training, and/or consulting services
 regarding the BoA Accused Products to its customers.¹⁶ At least BoA's customers and
 other end users of these BoA Accused Products then directly infringe the '278 patent
 by making or using, without NantWorks' authority, the BoA Accused Products.

164. On information and belief, BoA knows that the BoA Accused Products 7 8 are especially made or especially adapted for use in the infringement of the '278 9 patent. The infringing components of these products are not staple articles or commodities of commerce suitable for substantial noninfringing use, and the 10 infringing components of these products are a material part of the invention of the 11 '278 patent. Accordingly, in violation of 35 U.S.C. § 271(c), BoA is also contributing 12 13 to the direct infringement of the '278 patent by at least its customers and/or end users of these BoA Accused Products. The customers and/or end users of these BoA 14 Accused Products directly infringe the '278 patent by making or using, without 15 16 NantWorks' authority, the BoA Accused Products.

17 165. As a result of BoA's infringement of the '278 patent, NantWorks has
18 suffered, and will continue to suffer, substantial damages. Accordingly, BoA is liable
19 to NantWorks for damages adequate to compensate for BoA's acts of infringement,
20 in an amount to be proved at trial but in no event less than a reasonable royalty for the
21 use made of NantWorks' invention by BoA under 35 U.S.C. § 284.

- 166. In addition, BoA's acts of infringement have caused NantWorks
 irreparable harm that is not compensable by monetary damages. The hardships that
 an injunction would impose are less than those faced by NantWorks should an
- 23
- ¹⁶ See, e.g., https://www.bankofamerica.com/online-banking/mobile-and-online-banking-features/mobile-check-deposit/;
- 28 https://www.bankofamerica.com/online-banking/mobile-check-deposit-faqs/; https://promo.bankofamerica.com/mobile-check-deposit/

injunction not issue. The public interest would be served by issuance of an injunction. 1 Thus, NantWorks is entitled to a preliminary and a permanent injunction against 2 further infringement. Therefore NantWorks is entitled to injunctive relief under 35 3 U.S.C. § 283. 4

5 167. BoA's acts of infringement constitute willful, egregious misconduct, and consequently NantWorks is entitled to a discretionary increase of its damages award 6 up to three times the amount found or assessed, costs, and attorney's fees under 35 7 U.S.C. § 284. 8

9 168. Based on the foregoing facts, NantWorks requests that this Court declare this an exceptional case, and award Plaintiffs their costs and attorney's fees under 35 10 U.S.C. § 285. 11

Infringement of United States Patent No. 9,324,004

COUNT VIII:

169. NantWorks re-alleges and incorporates by reference the allegations of 14 the preceding paragraphs of this Complaint as if fully set forth herein. 15

16 170. In violation of 35 U.S.C. § 271, BoA has infringed and is currently infringing, directly and/or through intermediaries, the '004 patent by making, using, 17 18 selling, offering for sale, and/or importing into the United States, without authority, the BoA Accused Products that practice at least claim 1 of the '004 patent. The BoA 19 Accused Products meet each and every element this claim. BoA has infringed and is 20 currently infringing this claim literally and/or under the doctrine of equivalents. 21

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171. Exemplary claim 1 of the '004 patent states:

1. A method for processing a video stream, comprising:

analyzing, via a mobile device, a scene represented by the video stream for at least one object; 25

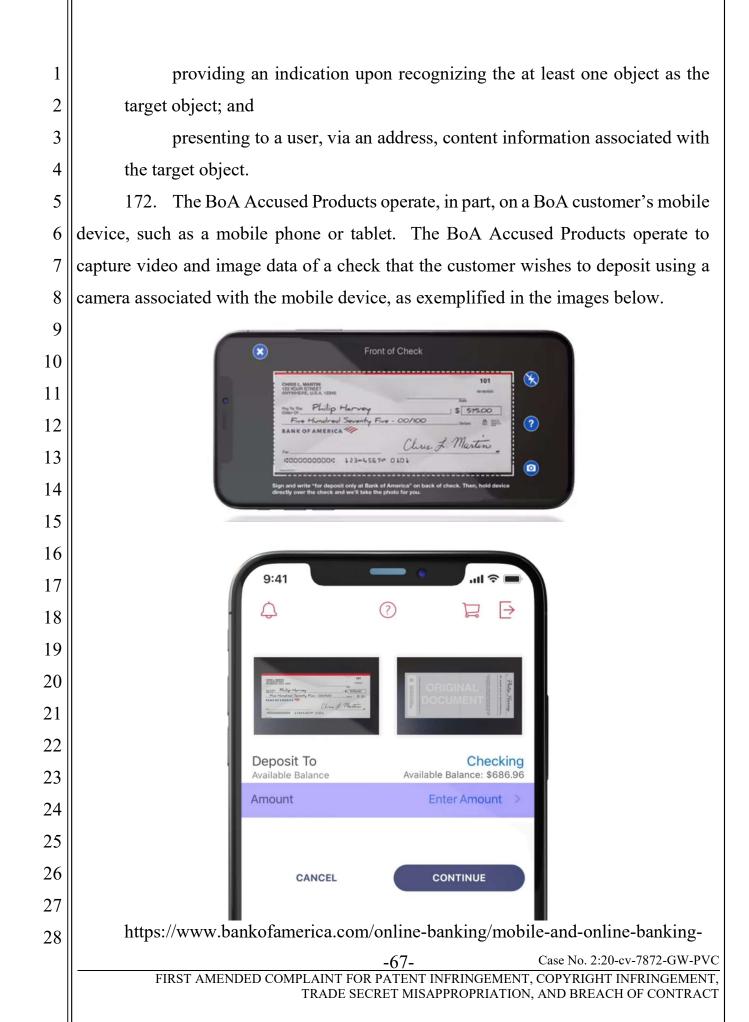
deriving at least one characteristic of the video stream;

27 recognizing the at least one object in the scene as a target object based at 28

least in part on the at least one characteristic of the video stream;

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FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT. COPYRIGHT INFRINGEMENT. TRADE SECRET MISAPPROPRIATION, AND BREACH OF CONTRACT



1 || features/mobile-check-deposit/

2 173. With regard to steps performed on a customer's mobile device, BoA 3 conditions the customer's use of the mobile check deposit functionality of the BoA's mobile banking application, and receipt of associated benefits (e.g., the ability to 4 5 remotely deposit checks using a mobile device), on the customer's performance of such steps. For example, BoA conditions the customer's use of the mobile banking 6 application through its Mobile Check Deposit Terms and Conditions, which are 7 8 provided to each customer upon the customer's enrollment to the BoA mobile banking application, and which the customer must accept in order to utilize the application. 9 The Mobile Check Deposit Terms and Conditions dictate the hardware and software 10 to be utilized by the customer and dictates the responsibilities of a customer with 11 regard to capturing an image of a check using a camera-enabled mobile device and 12 13 transferring such an image to BoA for image processing. The customer's use of the mobile banking application is further conditioned due to the design and functionality 14 of the BoA Accused Products. For example, actions performed at a customer's mobile 15 device, such as capturing an image of a check and transferring such an image are 16 necessary technological prerequisites in the customer's participation in BoA's mobile 17 deposit services. BoA also establishes the manner and timing of performance by 18 which a customer utilizes the BoA mobile banking application to perform mobile 19 check deposits. BoA establishes such manner and timing of performance through its 2021 Mobile Check Deposit Terms and Conditions and through BoA's design of the 22 functionality of the BoA mobile banking application, as described in this paragraph. 23 BoA further establishes the manner and timing of its customers' performance by providing detailed, step-by-step instructions for a customer to perform to perform 24 certain steps at the customer's mobile device to perform a mobile check deposit and 25 receive the associated benefits of BoA's mobile banking services. 26 See e.g., https://www.bankofamerica.com/online-banking/mobile-and-online-banking-27 28 features/mobile-check-deposit/; https://www.youtube.com/watch?v=-cGT khFQsQ. Case No. 2.20-cv-7872-GW-PVC

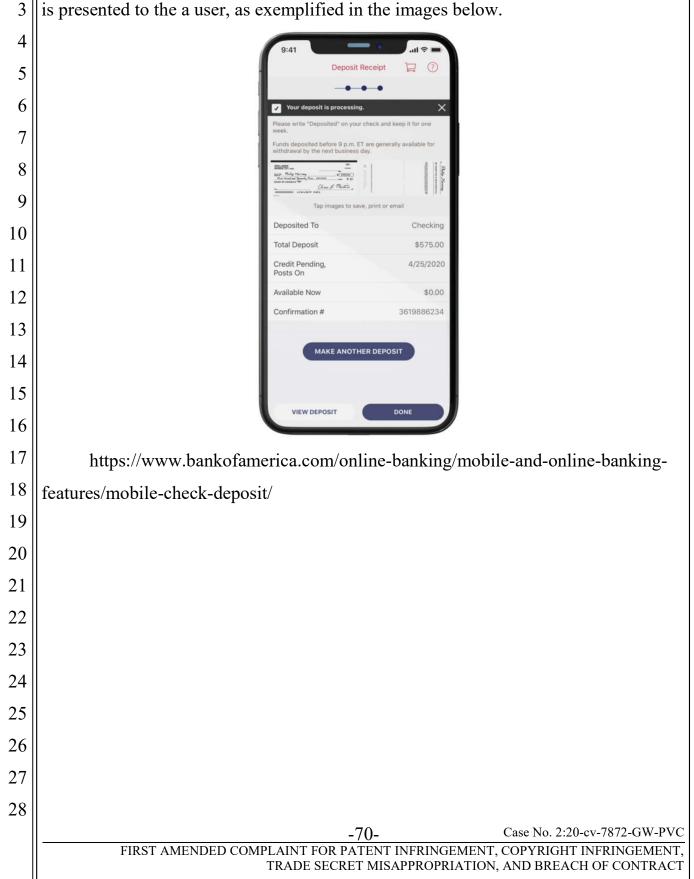
FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT, COPYRIGHT INFRINGEMENT, TRADE SECRET MISAPPROPRIATION, AND BREACH OF CONTRACT

174.

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175. On information and belief, the BoA Accused Products operate to identify
an object within the captured video/image data and distinguish the object present in
the video/image from others based on features of the object in the captured
video/image. For example, on information and belief, the BoA Accused Products
identify and distinguish the specific type of the check, as described in the below
image, as well as components thereof, such as writing, signatures, and alphanumeric
characters.

9 What types of checks are accepted with Mobile Check Deposit? We only accept checks from a U.S. financial institution, in U.S. dollars.³ The following items are eligible for 10 mobile deposit · Personal checks 11 Business checks · Government/treasury checks · Cashier's checks 12 Please visit a financial center to deposit the following items which are currently not accepted via mobile deposit 13 . U.S. savings bonds · Checks from foreign banks 14 · Money orders · Traveler's checks Image Replacement Documents (IRDs) 15 · Third-party checks · Checks not payable in U.S. dollars 16 https://www.bankofamerica.com/online-banking/mobile-check-deposit-faqs/ 17 176. BoA's Accused Products perform validation and verification of the 18 captured check image and perform a check deposit transaction with the BoA 19 customer's checking account, as described in the image below. 20 When will my funds be available? 21 Deposits are subject to verification and funds will not be available immediately. Once the deposit has been 22 received, you'll be able to view the pending transaction online or on your phone. Checks received by the applicable cutoff time on a business day are usually available in your account the next business day. 23 https://www.bankofamerica.com/online-banking/mobile-check-deposit-faqs/ 24 177. On information and belief, BoA's Accused Products associate identified 25 objects from the captured check image with relevant information associated with the 26 captured check, including, for example, information concerning monetary amount and 27 parties associated with the check, authorization and validity of the check, the date and 28 Case No. 2:20-cv-7872-GW-PVC -69-FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT, COPYRIGHT INFRINGEMENT, TRADE SECRET MISAPPROPRIATION, AND BREACH OF CONTRACT status of the checking transaction, and a confirmation number. BoA's Accused
 Products provide this information to the customer's device, whereon the information
 is presented to the a user, as exemplified in the images below.



| 1 | All Transactions 🐷 View Spending & Budgeting | | | | | | |
|----|---|--|--|--|--|--|--|
| 2 | More options 🗹 | | | | | | |
| 3 | Newest Next Previous Oldest Show deals: On ▼ Download Print this view ▼ ▼ Posting Date + Description Type Status Amount Bolescond | | | | | | |
| 4 | Showing results for [Show all transactions] | | | | | | |
| 5 | ♥ 03/20/2018 BKOFAMERICA MOBILE DEPOSIT *MOBILE FL | | | | | | |
| 6 | Edit Description Merchant name: BKOFAMERICA MOBILE 03/20 DEPOSIT *MOBILE | | | | | | |
| 7 | FL Edit Transaction category: Income: Deposits Edit | | | | | | |
| 8 | HILARY MARK G Particle 11 (1) (1) (1) (1) (1) (1) (1) (1) (1) | | | | | | |
| 9 | Orier de John Bankof America | | | | | | |
| 10 | in- Textest - mal the -1) | | | | | | |
| 11 | Front view Back view Both sides Print image & details | | | | | | |
| 12 | \$1.00 | | | | | | |
| 12 | | | | | | | |
| 13 | 178. On information and belief, BoA has had actual knowledge of its | | | | | | |
| 15 | infringement of the '004 patent since October 2016, but no later than the filing date | | | | | | |
| | of this Complaint. | | | | | | |
| 16 | 179. On information and belief, BoA had actual knowledge of its and its | | | | | | |
| 17 | customers' infringement of the '004 patent or was willfully blind thereto as of the | | | | | | |
| 18 | issue date of the '004 patent. For example: | | | | | | |
| 19 | • NantWorks and BoA collaborated closely as part of BoA's evaluation of | | | | | | |
| 20 | NantWorks' computer image recognition technologies. | | | | | | |
| 21 | • As part of their relationship, NantWorks made BoA aware of | | | | | | |
| 22 | NantWorks' patent portfolio covering computer image recognition and | | | | | | |
| 23 | processing. | | | | | | |
| 24 | • BoA's patent applications and patents cite numerous NantWorks patents | | | | | | |
| 25 | in the prosecution family of the '004 patent. | | | | | | |
| 26 | • BoA directly and wrongfully appropriated and incorporated NantWorks' | | | | | | |
| 27 | confidential image recognition and processing technology into BoA's | | | | | | |
| 28 | mobile check deposit software. On information and belief, BoA knew -71- Case No. 2:20-cv-7872-GW-PVC | | | | | | |
| | -7]- Case No. 2:20-cv-7872-GW-PVC FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT, COPYRIGHT INFRINGEMENT, TRADE SECRET MISAPPROPRIATION, AND BREACH OF CONTRACT | | | | | | |

or had reason to know that NantWorks owned patent rights covering the appropriated technology or that NantWorks would attain patent rights covering those technologies.

180. Notwithstanding BoA's actual notice of infringement, BoA has provided 4 5 and continues to provide the BoA Accused Products to its customers that make or use the BoA Accused Products with knowledge of or willful blindness to the fact that its 6 actions will induce others, including those customers, to directly infringe the '004 7 8 patent. BoA induces others including its customers to infringe the '004 patent in 9 violation of 35 U.S.C. § 271(b) by encouraging and facilitating others to perform actions that BoA knows to be acts of infringement of the '004 patent with intent that 10 those performing the acts infringe the '004 patent, or with willful blindness to such 11 12 facts. On information and belief, BoA, directly and/or through intermediaries, 13 advertises and distributes the BoA Accused Products, publishes instruction materials, specifications and promotional literature describing the operation of the BoA Accused 14 Products, and offers technical assistance, training, and/or consulting services 15 regarding the BoA Accused Products to its customers.¹⁷ At least BoA's customers and 16 17 other end users of these BoA Accused Products then directly infringe the '004 patent by making or using, without NantWorks' authority, the BoA Accused Products. 18

19 181. On information and belief, BoA knows that the BoA Accused Products
20 are especially made or especially adapted for use in the infringement of the '004
21 patent. The infringing components of these products are not staple articles or
22 commodities of commerce suitable for substantial noninfringing use, and the
23 infringing components of these products are a material part of the invention of the
24 '004 patent. Accordingly, in violation of 35 U.S.C. § 271(c), BoA is also contributing

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 17 See, e.g., https://www.bankofamerica.com/online-banking/mobile-and 27 online-banking-features/mobile-check-deposit/;
- 28 https://www.bankofamerica.com/online-banking/mobile-check-deposit-faqs/; https://promo.bankofamerica.com/mobile-check-deposit/

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to the direct infringement of the '004 patent by at least its customers and/or end users
 of these BoA Accused Products. The customers and/or end users of these BoA
 Accused Products directly infringe the '004 patent by making or using, without
 NantWorks' authority, the BoA Accused Products.

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182. As a result of BoA's infringement of the '004 patent, NantWorks has suffered, and will continue to suffer, substantial damages. Accordingly, BoA is liable to NantWorks for damages adequate to compensate for BoA's acts of infringement, in an amount to be proved at trial but in no event less than a reasonable royalty for the use made of NantWorks' invention by BoA under 35 U.S.C. § 284.

10 183. In addition, BoA's acts of infringement have caused NantWorks
11 irreparable harm that is not compensable by monetary damages. The hardships that
12 an injunction would impose are less than those faced by NantWorks should an
13 injunction not issue. The public interest would be served by issuance of an injunction.
14 Thus, NantWorks is entitled to a preliminary and a permanent injunction against
15 further infringement. Therefore NantWorks is entitled to injunctive relief under 35
16 U.S.C. § 283.

17 184. BoA's acts of infringement constitute willful, egregious misconduct, and
18 consequently NantWorks is entitled to a discretionary increase of its damages award
19 up to three times the amount found or assessed, costs, and attorney's fees under 35
20 U.S.C. § 284.

185. Based on the foregoing facts, NantWorks requests that this Court declare
this an exceptional case, and award Plaintiffs their costs and attorney's fees under 35
U.S.C. § 285.

COUNT IX:

Copyright Infringement

26 186. NantWorks re-alleges and incorporates by reference the allegations of
27 the preceding paragraphs of this Complaint as if fully set forth herein.

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187. NantWorks, through its subsidiary NantMoble LLC, registered a version
<u>-73-</u>
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of its mobile check deposit software ("Advanced Mobile Deposit Software v. 1.0")
 with the United States Copyright Office. A copy of the record of registration,
 Copyright Registration No. TX0008852717, is attached as Exhibit I.

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188. NantWorks LLC, owns and has a valid copyright in the NantWorks' Advanced Mobile Deposit Software v. 1.0. NantMobile assigned its ownership rights in the NantWorks' Advanced Mobile Deposit Software v. 1.0 to NantWorks prior to the filing of this action.

8 189. When registering its copyright, NantWorks deposited a representative
9 portion of the code relating to its Advanced Mobile Deposit Software v. 1.0 with the
10 Copyright Office. NantWorks did not include in the deposit the portions of code
11 relating to its Advanced Mobile Deposit Software v. 1.0 that included proprietary
12 algorithms, source code, object code and libraries containing NantWorks' trade
13 secrets.

14 190. NantWorks source code, object code, and libraries for NantWorks'
15 Advanced Mobile Deposit Software v. 1.0 are original literary works of authorship by
16 NantWorks employed programmers.

17 191. NantWorks' Advanced Mobile Deposit Software v. 1.0 was fixed in a
18 tangible medium of expression when it was stored in non-volatile computer memory
19 and/or media such as computer hard drives, CD, CD-R, DVD, or Blu-ray disks from
20 which it may be perceived, reproduced, or otherwise communicated for a period of
21 more than transitory duration. Accordingly, NantWorks' Advanced Mobile Deposit
22 Software v. 1.0 is a proper subject of copyright protection within the meaning of 17
23 U.S.C. § 102.

192. BoA had access to portions of NantWorks' mobile check deposit
 software including portions of NantWorks' Advanced Mobile Deposit Software v. 1.0
 through its collaboration with NantWorks. During this collaboration, BoA was
 provided with multiple versions of NantWorks' mobile check deposit software
 including portions of NantWorks' Advanced Mobile Deposit Software v. 1.0 pursuant
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1 to its agreements with NantWorks.

193. On information and belief, BoA utilized NantWorks' Advanced Mobile
Deposit Software v. 1.0 provided to BoA in mobile check deposit features in its
mobile application, including but not limited to, implementation of the NantWorks'
Advanced Mobile Deposit Software v. 1.0 source code and/or algorithms derived
from the source code in the source code underlying BoA's mobile check deposit
solution in its Bank of America Mobile Banking application.

8 194. On information and belief, BoA has copied, publicly displayed, and
9 distributed products (including versions of its Bank of America Mobile Banking
10 application) derived from NantWorks' Advanced Mobile Deposit Software v. 1.0 in
11 whole or in part, and will continue to do so.

12 195. BoA's products, such as versions of its Bank of America Mobile
13 Banking application, are substantially similar to the protected elements of
14 NantWorks' Advanced Mobile Deposit Software v. 1.0.

15 196. BoA has no license or any other form of permission to commercially
16 copy, sell, license or distribute NantWorks' Advanced Mobile Deposit Software v.
17 1.0.

18 197. On information and belief, users of BoA's mobile application must have obtained and used copyrightable portions of NantWorks' Advanced Mobile Deposit 19 Software v. 1.0 or works derived therefrom to use the mobile check deposit feature in 20 versions of BoA's Bank of America Mobile Banking application. BoA has thus 21 induced, caused, and materially contributed to the infringing acts of others by 22 23 encouraging, inducing, allowing and assisting others to use, copy, publically display, and distribute NantWorks' Advanced Mobile Deposit Software v. 1.0, and works 24 derived therefrom. 25

26 198. On information and belief, BoA's acts of direct, contributory, and/or
27 vicarious copyright infringement are willful, deliberate, and in utter disregard of
28 NantWorks' copyrights, pursuant to the Copyright Act, 17 U.S.C. § 504.

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1 199. BoA's acts of direct, contributory, and/or vicarious copyright
 2 infringement have caused and will continue to cause damage to NantWorks in an
 3 amount to be determined at trial.

COUNT X:

Violation of the Defend Trade Secrets Act

6 200. NantWorks re-alleges and incorporates by reference the allegations of
7 the preceding paragraphs of this Complaint as if fully set forth herein.

8 201. The actions of BoA as described above constitute violations of one or
9 more provisions of the Defend Trade Secrets Act of 2016 ("DTSA"), PL 114-153,
10 May 11, 2016, 130 Stat 376, which amends the Economic Espionage Act, 18 U.S.C.
11 § 1831 *et seq*.

202. NantWorks is the owner of trade secrets relating to digital image
recognition and processing systems. NantWorks' trade secrets include proprietary
algorithms and information relating to digital image recognition and processing
systems, embodied, described and performed in software, documentation, and code,
including but not limited to any version of NantWorks' Advanced Mobile Deposit
Software v. 1.0.

18 203. NantWorks' trade secrets constitute independent economic value and are19 not generally known or readily ascertainable.

20 204. At all times, NantWorks has taken reasonable efforts to keep its trade
21 secrets secret through the use of non-disclosure and confidentiality agreements,
22 employment agreements, employee training, limiting employee access, and password
23 protection and encryption.

24 205. NantWorks has also taken steps to protect the trade secrets relating to its
 25 Advanced Mobile Deposit Software v. 1.0 copyright (Registration No.
 26 TX0008852717). Specifically, when registering its copyright, NantWorks deposited
 27 a representative portion of the code relating to its Advanced Mobile Deposit Software
 28 v. 1.0 with the Copyright Office. NantWorks did not include in the deposit the
 27 <u>- Case No. 2:20-cv-7872-GW-PVC</u>
 28 FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT, COPYRIGHT INFRINGEMENT,

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portions of code relating to its Advanced Mobile Deposit Software v. 1.0 that included
 proprietary algorithms, source code, object code and libraries containing NantWorks'
 trade secrets. Moreover, NantWorks maintained the secrecy of the portions of code
 relating to Advanced Mobile Deposit Software v. 1.0 that it deposited with the
 Copyright Office prior to making that deposit with the Copyright Office.

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206. BoA acquired Plaintiff's trade secrets through a relationship of trust and 6 by way of an April 2010 non-disclosure agreement, the parties' 2011 Collaboration 7 8 May 2013 non-disclosure Agreement, and agreement (collectively а 9 "NantWorks/BoA Agreements"), which imposed a duty upon BoA to maintain the confidentiality of NantWorks' confidential information and trade secrets and to not 10 improperly use and/or disclose confidential information and trade secrets belonging 11 to NantWorks. At all relevant times, BoA knew about the confidential nature of 12 13 NantWorks' trade secrets.

207. BoA misappropriated NantWorks' trade secrets by improper means in 14 15 violation of the NantWorks/BoA Agreements by using them and continuing to use 16 them for BoA's own economic benefit. For example, as described above, upon 17 information and belief, BoA misappropriated NantWorks' trade secrets hundreds of times by improperly accessing and improperly using NantWorks' mobile check 18 deposit software hundreds of times during 2014, 2015, 2016, 2017 and 2018 to gain 19 an understanding of how NantWorks' software functioned and acquire trade secrets 20within NantWorks' software. In addition, upon information and belief, BoA 21 improperly accessed and improperly used documentation and other information 22 23 relating to NantWorks' mobile check deposit software it has obtained pursuant to the 24 NantWorks/BoA Agreements during 2015, 2016, 2017 and 2018 to gain an 25 understanding of how NantWorks' software functioned and acquire trade secrets Upon information and belief, BoA then 26 relating to NantWorks' software. incorporated and used the NantWorks trade secrets it improperly accessed, acquired, 27 and used during 2014, the NantWorks trade secrets it improperly accessed, acquired, 28 Case No. 2:20-cv-7872-GW-PVC

and used during 2015, the NantWorks trade secrets it improperly accessed, acquired, 1 and used during 2016, the NantWorks trade secrets it improperly accessed, acquired, 2 3 and used during 2017, and the NantWorks trade secrets it improperly accessed, acquired, and used during 2018 in different versions of its own mobile check deposit 4 5 solution, including the commercially available versions of its mobile check deposit software that BoA has provided to its customers from 2014 to the present. On 6 information and belief, BoA used NantWorks' trade secrets to inform the 7 8 development of and implement features developed by NantWorks into BoA's mobile 9 banking software.

208. BoA has intentionally, willfully and maliciously misused trade secrets
and/or confidential or proprietary information or knowledge of NantWorks, and
continues to do so, in violation of a confidential relationship.

13 209. As a consequence of the foregoing, NantWorks has suffered and will14 continue to suffer irreparable harm and loss.

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COUNT XI:

Misappropriation of Trade Secrets Under California Law

17 210. NantWorks re-alleges and incorporates by reference the allegations of18 the preceding paragraphs of this Complaint as if fully set forth herein.

19 211. The actions of BoA as described above constitute violations of one or
20 more provisions of the California Uniform Trade Secrets Act ("CUTSA"), Cal. Civ.
21 Code § 3426, *et seq*.

212. NantWorks is the owner of trade secrets relating to digital image
recognition and processing systems. NantWorks' trade secrets include proprietary
algorithms and information relating to digital image recognition and processing
systems, embodied, described and performed in software, documentation, and code,
including but not limited to any version of NantWorks' Advanced Mobile Deposit
Software v. 1.0.

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 213. NantWorks' trade secrets constitute independent economic value and are

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1 not generally known or readily ascertainable.

2 214. At all times, NantWorks has taken reasonable efforts to keep its trade
3 secrets secret through the use of non-disclosure and confidentiality agreements,
4 employment agreements, employee training, limiting employee access, and password
5 protection and encryption.

215. NantWorks has also taken steps to protect the trade secrets relating to its 6 7 Advanced Mobile Deposit Software v. 1.0 copyright (Registration No. TX0008852717). Specifically, when registering its copyright, NantWorks deposited 8 a representative portion of the code relating to its Advanced Mobile Deposit Software 9 v. 1.0 with the Copyright Office. NantWorks did not include in the deposit portions 10 of code relating to its Advanced Mobile Deposit Software v. 1.0 that included 11 proprietary algorithms, source code, object code and libraries containing NantWorks' 12 13 trade secrets. Moreover, NantWorks maintained the secrecy of the portions of code relating to Advanced Mobile Deposit Software v. 1.0 that it deposited with the 14 Copyright Office prior to making that deposit with the Copyright Office. 15

16 216. BoA acquired Nantworks' trade secrets through a relationship of trust
17 and by way of the NantWorks/BoA Agreements, which imposed a duty upon BoA to
18 maintain the confidentiality of NantWorks' confidential information and trade secrets
19 and to not improperly use and/or disclose confidential information and trade secrets
20 belonging to NantWorks. At all relevant times, BoA knew about the confidential
21 nature of NantWorks' trade secrets.

217. BoA misappropriated NantWorks' trade secrets by improper means in
 violation of the NantWorks/BoA Agreements by using them and continuing to use
 them for BoA's own economic benefit. For example, as described above, upon
 information and belief, BoA misappropriated NantWorks' trade secrets hundreds of
 times by improperly accessing and improperly using NantWorks' mobile check
 deposit software hundreds of times during 2014, 2015, 2016, 2017 and 2018 to gain
 an understanding of how NantWorks' software functioned and acquire trade secrets

within NantWorks' software. In addition, upon information and belief, BoA 1 improperly accessed and improperly used documentation and other information 2 3 relating to NantWorks' mobile check deposit software it has obtained pursuant to the NantWorks/BoA Agreements during 2015, 2016, 2017 and 2018 to gain an 4 5 understanding of how NantWorks' software functioned and acquire trade secrets Upon information and belief, BoA then relating to NantWorks' software. 6 incorporated and used the NantWorks trade secrets it improperly accessed, acquired, 7 8 and used during 2014, the NantWorks trade secrets it improperly accessed, acquired, 9 and used during 2015, the NantWorks trade secrets it improperly accessed, acquired, and used during 2016, the NantWorks trade secrets it improperly accessed, acquired, 10 11 and used during 2017, and the NantWorks trade secrets it improperly accessed, acquired, and used during 2018 in different versions of its own mobile check deposit 12 13 solution, including the commercially available versions of its mobile check deposit software that BoA has provided to its customers from 2014 to the present. On 14 information and belief, BoA used NantWorks' trade secrets to inform the 15 development of and implement features developed by NantWorks into BoA's mobile 16 banking software. 17

- 18 218. BoA has intentionally, willfully and maliciously misused trade secrets
 19 and/or confidential or proprietary information or knowledge of NantWorks, and
 20 continues to do so, in violation of a confidential relationship.
- 21 219. As a consequence of the foregoing, NantWorks has suffered and will
 22 continue to suffer irreparable harm and loss.
- 23
- 24

Breach of Contract under New York and California Law

COUNT XII:

25 220. NantWorks re-alleges and incorporates by reference the allegations of
26 the preceding paragraphs of this Complaint as if fully set forth herein.

27 221. Beginning in 2010, NantWorks entered into the NantWorks/BoA
 28 Agreements with BoA for the limited purpose of potentially assisting with the <u>-80-</u> Case No. 2:20-cv-7872-GW-PVC

development of the mobile checking deposit application that BoA was building for
 commercial use. As is relevant to the instant dispute, the NantWorks/BoA
 Agreements are governed by California and/or New York substantive law.

- 4 222. Under the NantWorks/BoA Agreements, the parties agreed that any trade
 5 secrets or other confidential information shall remain the property of the originating
 6 party. BoA had a duty to use care to prevent disclosure, publication or dissemination
 7 of NantWorks' confidential information and to use this confidential information only
 8 for the purposes of evaluating the proposed business venture.
- 9 223. Under the protection of the NantWorks/BoA Agreements, NantWorks
 10 disclosed trade secrets and other confidential information to BoA.

224. BoA breached the NantWorks/BoA Agreements by using and/or 11 disclosing Plaintiff's trade secrets and other confidential information for its own 12 13 benefit in a manner not permitted by the NantWorks/BoA Agreements. For example, as described above, upon information and belief, BoA breached the NantWorks/BoA 14 Agreements hundreds of times by improperly accessing and improperly using 15 NantWorks' mobile check deposit software hundreds of times during 2014, 2015, 16 2016, 2017 and 2018 to gain an understanding of how NantWorks' software 17 functioned and acquire trade secrets within NantWorks' software. In addition, upon 18 information and belief, BoA improperly accessed and improperly used documentation 19 and other information relating to NantWorks' mobile check deposit software it has 2021 obtained pursuant to the NantWorks/BoA Agreements during 2015, 2016, 2017 and 22 2018 to gain an understanding of how NantWorks' software functioned and acquire 23 trade secrets relating to NantWorks' software. Upon information and belief, BoA 24 then incorporated and used the NantWorks trade secrets it improperly accessed, acquired, and used during 2014, the NantWorks trade secrets it improperly accessed, 25 acquired, and used during 2015, the NantWorks trade secrets it improperly accessed, 26 acquired, and used during 2016, the NantWorks trade secrets it improperly accessed, 27 acquired, and used during 2017, and the NantWorks trade secrets it improperly 28 Case No. 2:20-cv-7872-GW-PVC accessed, acquired, and used during 2018 in different versions of its own mobile check
 deposit solution, including the commercially available versions of its mobile check
 deposit software that BoA has provided to its customers from 2014 to the present. On
 information and belief, BoA used NantWorks' trade secrets to inform the
 development of and implement features developed by NantWorks into BoA's mobile
 banking software.

225. Upon information and belief, BoA used NantWorks' trade secrets and
confidential information in BoA's mobile check deposit software in a manner not
permitted by the NantWorks/BoA Agreements.

10 226. As a result of the BoA's breach, NantWorks has suffered damages in an
11 amount to be determined at trial.

12 <u>PRAYER FOR RELIEF</u> 13 WHEREFORE, NantWorks respectfully requests: 14 A. That Judgment be entered that: 15 a. BoA has infringed one or more claims of the Asserted Patents,

16 directly and indirectly, literally and/or under the doctrine of equivalents;

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b. BoA has infringed NantWorks' copyright rights;

c. BoA has misappropriated NantWorks' protected trade secrets;

d. BoA has breached their contractual obligations to NantWorks.

B. That, in accordance with 35 U.S.C. § 283, BoA, and all of their affiliates,
employees, agents, officers, directors, attorneys, successors, and assigns and all those
acting on behalf of or in active concert or participation with any of them, be
preliminarily and permanently enjoined from (1) infringing the Asserted Patents and
(2) making, using, selling, and offering for sale the mobile check deposit feature of
the Bank of America Mobile Banking application and/or backend servers enabling
the accused functionality of such application;

C. An order directing BoA to file with the Court and serve upon
 NantWorks' counsel within thirty (30) days after entry of the order of injunction, a
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 Case No. 2:20-cv-7872-GW-PVC
 FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT, COPYRIGHT INFRINGEMENT.

| 1 | report setting forth the manner and form in which BoA has complied with the | | | | | |
|----|--|--|-------|--|--|--|
| 2 | injunction, including the provision relating to destruction and recall of infringing | | | | | |
| 3 | products and materials; | | | | | |
| 4 | D. | D. An award of damages sufficient to compensate NantWorks for BoA's | | | | |
| 5 | infringement under 35 U.S.C. § 284, including an enhancement of damages on | | | | | |
| 6 | account of BoA's willful infringement; | | | | | |
| 7 | E. | E. That the case be found exceptional under 35 U.S.C. § 285 and that | | | | |
| 8 | NantWorks be awarded its reasonable attorneys' fees; | | | | | |
| 9 | F. | F. Costs and expenses in this action; | | | | |
| 10 | G. | G. An award of prejudgment and post-judgment interest; and | | | | |
| 11 | H. | Such other and further relief as the Court may deem just and pro | oper. | | | |
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| 13 | DATED: 1 | November 11, 2020 QUINN EMANUEL URQUHART & | | | | |
| 14 | | SULLIVAN, LLP | | | | |
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| 16 | By /s/ Kevin P.B. Johnson | | | | | |
| 17 | Kevin P.B. Johnson | | | | | |
| 18 | Todd Briggs QUINN EMANUEL URQUHART | | | | | |
| 19 | | & SULLIVAN LLP | | | | |
| 20 | 555 Twin Dolphin Dr., 5th Floor Redwood Shores, California 94065 | | | | | |
| 21 | | Tel.: (650) 801-5000 | | | | |
| 22 | | Fax: (650) 801-5100 | | | | |
| 23 | | Attorneys for Plaintiff | | | | |
| 24 | NANTWORKS, LLC and NANT HOLDINGS IP, LLC | | | | | |
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| | <u> </u> | -83- Case No. 2:20-cv-78 FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT, COPYRIGHT INFRI | | | | |
| | TRADE SECRET MISAPPROPRIATION, AND BREACH OF CONTRACT | | | | | |

| Case 2 | 20-cv-07872-GW-PVC | Document 40 | Filed 11/11/20 | Page 85 of 86 | Page ID #:463 | |
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| | | | | | | |
| 1 | | DEMANI | D FOR JURY 1 | FRIAL | | |
| 2 | Pursuant to Rule 38 of the Federal Rules of Civil Procedure, NantWorks | | | | | |
| 3 | respectfully demands a trial by jury on all issues triable by jury. | | | | | |
| 4 | | | | | | |
| 5 | DATED: November | 11, 2020 | • | NUEL URQUI | HART & | |
| 6 | | | SULLIVAN, I | LLP | | |
| 7 | | | | | | |
| 8 | | | By /s/ Kevir | ı P.B. Johnson | | |
| 9 | | | Kevin P.B. | | | |
| 10 | | | Todd Brig | gs MANUEL UR(| | |
| 11 | | | | IVAN LLP | QUIIAKI | |
| 12 | | | | Dolphin Dr., 5t | | |
| 13 | | | | Shores, Califor)) 801-5000 | ma 94065 | |
| 14 | | | Fax: (650 |) 801-5100 | | |
| 15 | | | Attorneys | for Plaintiff | | |
| 16 | | | | ORKS, LLC and | 1 NANT | |
| 17 | | | HOLDING | GS IP, LLC | | |
| 18 | | | | | | |
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| 1 | ATTESTATION | | | | |
|----|---|--|--|--|--|
| 2 | I, Todd Briggs, am the ECF user whose ID and password are being used to file | | | | |
| 3 | the above document. In compliance with Local Rule 5-4, I hereby attest that Kevin | | | | |
| 4 | Johnson has concurred in the filing of the above document. | | | | |
| 5 | | | | | |
| 6 | /s/ Todd Briggs | | | | |
| 7 | Todd Briggs | | | | |
| 8 | Todd Diiggs | | | | |
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| | -85- Case No. 2:20-cv-7872-GW-PVC FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT, COPYRIGHT INFRINGEMENT, | | | | |
| | TRADE SECRET MISAPPROPRIATION, AND BREACH OF CONTRACT | | | | |