

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

KAavo INC.,)	
)	
Plaintiff,)	
)	C.A. No. 1:14-cv-1193-LPS-CJB
v.)	
)	JURY TRIAL DEMANDED
TIER 3, INC., APPFOG, INC. and SAVVIS)	
COMMUNICATIONS CORPORATION,)	
)	
Defendants.)	

SECOND AMENDED COMPLAINT

For its Complaint, Plaintiff Kaavo Inc. ("Kaavo"), by and through the undersigned counsel, alleges as follows:

THE PARTIES

1. Kaavo is a Delaware corporation with a place of business at 9600 Great Hills Trail, Suite 150W, Austin, Texas 78759.

2. Defendant Tier 3, Inc. ("Tier 3") is a Delaware corporation with, upon information and belief, a place of business located at 110 110th Avenue NE, Bellevue, Washington 98004.

3. Defendant Appfog, Inc. ("Appfog") is a Delaware corporation with, upon information and belief, a place of business located at 100 CenturyLink Drive, Monroe, Louisiana 71203.

4. Savvis Communications Corporation is a Missouri corporation with, upon information and belief, a place of business located at 100 CenturyLink Drive, Monroe, Louisiana 71203.

5. Upon information and belief, Tier 3, Appfog and Savvis Communications Corporation (collectively, "Defendants") are related entities.

JURISDICTION AND VENUE

6. This action arises under the Patent Act, 35 U.S.C. § 1 *et seq.*

7. Subject matter jurisdiction is proper in this Court under 28 U.S.C. §§ 1331 and 1338.

8. Upon information and belief, Defendants conduct substantial business in this forum, directly or through intermediaries, including: (i) at least a portion of the infringements alleged herein; and (ii) regularly doing or soliciting business, engaging in other persistent courses of conduct and/or deriving substantial revenue from goods and services provided to individuals in this district.

9. Venue is proper in this district pursuant to §§ 1391(b), (c) and 1400(b).

BACKGROUND

10. On September 18, 2012, United States Patent No. 8,271,974 (the "'974 patent"), entitled "Cloud Computing Lifecycle Management for N-tier Applications" was duly and lawfully issued by the U.S. Patent and Trademark Office. A true and correct copy of the '974 patent is attached hereto as Exhibit A.

11. Kaavo is the assignee and owner of the right, title and interest in and to the '974 patent, including the right to assert all causes of action arising under said patents and the right to any remedies for infringement of them.

12. Kaavo is a cloud computing company that has invested substantial resources into the development and sale of software for automating the deployment and management of applications, workloads, and IT environments across public, private, and hybrid clouds.

13. Kaavo was founded in 2007 by enterprise IT veterans with experience in delivering and managing mission critical IT applications and business services. In

recognition of its groundbreaking technological developments in the field of cloud computing, Kaavo has received accolades from leading industry sources such as Gartner, TechTarget, and InformationWeek.

14. Kaavo has invested a significant amount of financial and intellectual capital into the development of pioneering technologies such as the cloud computing lifecycle management for n-tier applications systems and methods that are disclosed in the '974 patent.

15. The technology recited in the claims of the '974 patent provides an inventive concept and does not claim an abstract idea. The inventive concept greatly enhances and facilitates the operation of multiple virtual servers within a single physical server system, such that each virtual sever may operate within its own unique system environment (e.g., operating system, applications), thus improving the functioning of a computer system. Exh. A. at col. 1, ll. 12-15. For example, the '974 patent describes technology that provides users remote access to their resources from any location. *Id.* at col. 1, ll. 22-26. Multiple users can be physically separated from one another, but still appear to be in one location. *Id.* at col. 1, ll. 27-30.

16. A key and inventive component of the '974 patent is the claimed management system, methods, and devices for managing a cloud computing environment to ensure reliability and optimal performance.

17. The claims of the '974 patent set forth the primary requirements of the management systems, methods, and devices by reciting a processor configured with a memory to determine a requested initial cloud environment based on user-defined provisioning information, where the requested initial cloud environment is not yet instantiated and is an N-tier computing environment; send an initialization event based on

the requested initial cloud environment, where the initialization event is configured to cause an initial cloud environment configuration to be made available to an application; send application data that is configured to cause the application to begin execution in the initial cloud environment configuration; receive monitoring environment data that represents a current cloud environment state; determine a requested adjusted cloud environment based on the monitoring environment data, where the requested adjusted cloud environment is an N-tier computing environment; and send a cloud environment adjustment event based on the requested adjusted cloud environment, where the cloud environment adjustment event is configured to cause an adjusted cloud environment configuration to be made available to the application. *Id.* at col. 20, ll. 12-36.

18. The technology claimed in the '974 patent does not preempt all ways for setting up and managing a computer environment. For example, the claims apply only to a specific type of computer environment: cloud computing. Further, the independent claims require determining an adjusted cloud environment based on monitoring data and sending a cloud environment adjustment event. Applications running in a cloud environment need not be managed in this way. For example, additional resources can simply be allocated in the first instance, allowing for expansion of the application without adjusting the cloud environment.

19. Defendants can set up and manage computer environments without infringing the '974 patent. For example, the prior art cited on the face of the '974 patent remains available for practice by the Defendants, and the '974 patent claims do not preempt practice of those prior art methods.

20. The '974 patent claims cannot be practiced by a human alone and there exists no human analogue to the methods claimed in the '974 patent. The claims are

specifically directed to management of a cloud computing environment – a thing that exists only in the context of computers.

21. The dependent claims of the '974 patent add additional limitations demonstrating that they are also not directed to any abstract ideas, contain inventive concepts, and do not preempt all ways of setting up and managing computer environments. Claims 2, 3, 4, 14, 15, 16, 25, 26, 27, 36, 37 and 38, for example, contain specific limitations relating to multiple cloud providers. Claims 5, 17, 28 and 39 contain specific limitations relating to forecasting an optimal cloud environment for future use. Claims 6, 7, 18, 19, 29, 30, 40 and 41 contain specific limitations relating to forecasting a future cost associated with executing the application. Claims 8, 20, 31 and 42 contain specific limitations relating to using a needs analysis algorithm. Claims 9, 10, 21, 32 and 44 contain specific limitations relating to certain types of provisioning information. Claims 11, 23, 34 and 45 contain specific limitations relating to security. Defendants can set up and manage computer environments without infringing any of these claims.

COUNT I – INFRINGEMENT OF U.S. PATENT NO. 8,271,974

22. Kaavo repeats and realleges the allegations of paragraphs 1 through 21 as if fully set forth herein.

23. Without license or authorization and in violation of 35 U.S.C. § 271(a), Defendants have infringed and induced infringement and continue to infringe and induce infringement of the '974 patent by making, using, importing, offering for sale, and/or selling methods and systems for management of a cloud computing environment for use by a software application, including, but not limited to CenturyLink Cloud, which is covered by one or more claims of the '974 patent.

24. Kaavo's initial complaint was filed on September 15, 2014.

25. Savvis Communications Corporation was served the initial complaint by first class mail and received it on September 22, 2014.

26. Thus, Savvis Communications Corporation has been on notice of the '921 patent since, at the latest, the date it was served the Complaint.

27. On November 10, 2014, the parties filed a Stipulation and [Proposed] Order to Substitute and Extend Time which sought to substitute Tier 3 and Appfog for initial defendant CenturyLink, Inc.

28. Thus, Tier 3 and Appfog have been on notice of the '921 patent since, at the latest, November 10, 2014.

29. Upon information and belief, Defendants have not altered their infringing conduct after receiving the initial complaint.

30. Upon information and belief, Defendants' continued infringement despite its knowledge of the '974 patent and the accusations of infringement has been objectively reckless and willful.

31. In particular, Defendants' customers' and end-users' use of Defendants' methods and systems for management of a cloud computing environment for use by a software application, including, but not limited to CenturyLink Cloud, is facilitated by the use of determining an adjusted cloud environment based on monitoring data and sending a cloud environment adjustment event patented under the '974 patent. Thus, Defendants' customers and end-users are able to manage a cloud computing environment when using such methods and systems. In CenturyLink Cloud, Defendants' customers and end-users are able to manage cloud computing environments so software applications may run on them.

32. On information and belief, in order to generate profits and revenues,

Defendants market and promote, e.g., through their websites and sales personnel, the use of its methods and systems that infringe the '974 patent when used as intended by Defendants' customers and end-users. Defendants' customers and end-users use such methods and systems (including, e.g., Defendants' software). Defendants further instruct their customers and end-users how to use such methods and systems in a manner that infringes the '974 patent (e.g., through on-line technical documentation, instructions and technical support). Defendants further instruct their customers and end-users to infringe the '974 patent through the methods and systems themselves, e.g., through on-line instructions and intuitive user interfaces.

33. In particular, Defendants instruct their customers and end-users through at least on-line support instructions and documentation over the Internet how to manage cloud computing environments so software applications may run on them.

34. Defendants still further make such methods and systems accessible to their customers and end-users via the Internet, thus enabling and encouraging its customers and end-users to use such methods and systems, including supporting software systems, to infringe the '974 patent.

35. On information and belief, even though Defendants have been aware of the '974 patent and that their customers and end-users infringe the '974 patent and Defendants have neither made any changes to the functionality, operations, marketing, sales, technical support, etc. of such methods and systems to avoid infringing the '974 patent nor informed their customers or end-users how to avoid infringing the '974 patent. To date, Defendants have not identified a single action that it has taken to avoid infringement (e.g., by designing around or notifying its customers or end-users how to avoid infringement) by themselves or their customers or end-users since they

became aware of the '974 patent.

36. On information and belief, Defendants themselves are unaware of any legal or factual basis that their actions solely, or in combination with the actions of their customers and end-users, do not constitute direct or indirect infringement of the '974 patent. To date, Defendants have not produced any opinion of counsel, request for opinion of counsel, evaluation, analysis, or investigation relating to the validity, scope, interpretation, construction, enforceability, unenforceability, or the infringement or potential infringement of any claim of the '974 patent.

37. As such, on information and belief, despite the information Defendants obtained from the initial complaint in this action, Defendants continue to specifically intend for and encourage their customers and end-users to use its methods and/or systems in a manner that infringe the claims of the '974 patent. In addition, since at least the dates they were on notice of the '974 patent, Defendants have deliberately avoided taking any actions (e.g., designing around, or providing notice to its customers) to avoid confirming that their actions continue to specifically encourage their customers and end-users to use their methods and/or systems in a manner that infringe the claims of the '974 patent.

38. Defendants' actions of, *inter alia*, making, importing, using, offering for sale, and/or selling such methods and/or systems constitute an objectively high likelihood of infringement of the '974 patent, which was duly issued by the United States Patent and Trademark Office and is presumed valid. Since at least the filing of the initial complaint or the date of the Stipulation and [Proposed] Order to Substitute and Extend Time, Defendants are aware that there is an objectively high likelihood that their actions constituted, and continue to constitute, infringement of the '974

patent and that the '974 patent is valid. Despite Defendants' knowledge of that risk, on information and belief, Defendants have not made any changes to the relevant operation of its methods and/or systems and have not provided their users and/or customers with instructions on how to avoid infringement the '974 patent. Instead, Defendants have continued to, and still are continuing to, among other things, make, use, offer for sale, and/or sell methods and/or systems patented under the '974 patent. As such, Defendants willfully, wantonly and deliberately infringed and are infringing the '974 patent in disregard of Kaavo's rights under the '974 patent.

39. Kaavo is entitled to recover from Defendants the damages sustained by Kaavo as a result of Defendants' infringement of the '974 patent in an amount subject to proof at trial, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

40. Defendants' use of Kaavo's patented technology to build and profit from their own cloud computing businesses has caused, is causing and will continue to cause Kaavo irreparable harm unless enjoined by this Court.

JURY DEMAND

Kaavo hereby demands a trial by jury on all issues so triable.

PRAYER FOR RELIEF

WHEREFORE, Kaavo requests that this Court enter judgment against Defendants as follows:

- A. An adjudication that Defendants have infringed the '974 patent;
- B. A judgment that Defendants have induced infringement of the '974 patent;
- C. A preliminary and permanent injunction enjoining Defendants and their officers, directors, agents, servants, affiliates, employees, divisions, branches,

subsidiaries, parents, and all others acting in active concert or participation with it, from making, using, offering to sell, or selling in the United States or importing into the United States any devices, methods or systems that infringe any claim of the '974 patent, or contributing to or inducing the same by others;

D. An award of damages to be paid by Defendants adequate to compensate Kaavo for Defendants' past infringement of the '974 patent and any continuing or future infringement through the date such judgment is entered, including interest, costs, expenses and an accounting of all infringing acts including, but not limited to, those acts not presented at trial;

E. A declaration that this case is exceptional under 35 U.S.C. § 285, and an award of Kaavo's reasonable attorneys' fees;

F. An award of enhanced damages pursuant to 35 U.S.C. § 284 for Defendants' willful infringement of the '974 patent subsequent to the date of their notice of the '974 patent; and

G. An award to Kaavo of such further relief at law or in equity as the Court deems just and proper.

Dated: January 16, 2015

STAMOULIS & WEINBLATT LLC

/s/ Richard C. Weinblatt

Stamatios Stamoulis #4606

stamoulis@swdelaw.com

Richard C. Weinblatt #5080

weinblatt@swdelaw.com

Two Fox Point Centre

6 Denny Road, Suite 307

Wilmington, DE 19809

Telephone: (302) 999-1540

Attorneys for Plaintiff

Kaavo Inc.