IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLORADO

Civil Action No.:

ZOO DIGITAL LIMITED, a Great Britain company,

Plaintiff,

v.

ADOBE, INC., a Delaware corporation,

Defendant.

COMPLAINT FOR INFRINGEMENT OF PATENT

Now comes Plaintiff, Zoo Digital Limited ("Plaintiff" or "Zoo Digital"), by and through undersigned counsel, and respectfully alleges, states, and prays as follows:

NATURE OF THE ACTION

1. This is an action for patent infringement under the Patent Laws of the United States, Title 35 United States Code ("U.S.C.") to prevent and enjoin Defendant Adobe, Inc. (hereinafter "Defendant"), from infringing and profiting, in an illegal and unauthorized manner, and without authorization and/or consent from Plaintiff from U.S. Patent No 7,574,103 ("the '103 Patent" or the "Patent-in-Suit"), which is attached hereto as Exhibit A and incorporated herein by reference, and pursuant to 35 U.S.C. §271, and to recover damages, attorney's fees, and costs.

THE PARTIES

2. Plaintiff is a Great Britain company with its principal place of business at City Gate, 8 St Mary's Gate, Sheffield, S1 4LW, United Kingdom.

3. Upon information and belief, Defendant is a corporation organized under the laws of Delaware, having a principal place of business at 345 Park Avenue, San Jose, California 95110-

2704. Upon information and belief, Defendant may be served with process c/o Corporation Service Company, 1900 West Littleton Boulevard, Littleton, Colorado 80120.

4. Defendant maintains a physical presence in this judicial district through its operation of its facility located at 707 Seventeenth Street, Denver, Colorado 80202.

JURISDICTION AND VENUE

5. This is an action for patent infringement in violation of the Patent Act of the United States, 35 U.S.C. §§1 *et seq*.

6. The Court has subject matter jurisdiction over this action pursuant to 28 U.S.C. §§1331 and 1338(a).

7. This Court has personal jurisdiction over Defendant by virtue of its systematic and continuous contacts with this jurisdiction and its residence in this District, as well as because of the injury to Plaintiff, and the cause of action Plaintiff has risen in this District, as alleged herein.

8. Defendant has established minimum contacts with this forum such that exercise of jurisdiction over the Defendant would not offend traditional notions of fair play and substantial justice.

9. Defendant is subject to this Court's specific and general personal jurisdiction pursuant to its substantial business in this forum, including: (i) at least a portion of the infringements alleged herein; (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 forum state and in this judicial District; and (iii) being physically located in this District.

10. Venue is proper in this judicial district pursuant to 28 U.S.C. §1400(b) because Defendant resides in this District under the Supreme Court's opinion in *TC Heartland v. Kraft*

Foods Group Brands LLC, 137 S. Ct. 1514 (2017) through its physically located, and regular and established place of business in this District.

FACTUAL ALLEGATIONS

11. On August 11, 2009, the United States Patent and Trademark Office ("USPTO") duly and legally issued the '103 Patent, entitled "AUTHORING OF COMPLEX AUDIOVISUAL PRODUCTS" after a full and fair examination. The '103 Patent is attached hereto as Exhibit A and incorporated herein as if fully rewritten.

12. Plaintiff is presently the owner of the '103 Patent, having received all right, title and interest in and to the '103 Patent. Plaintiff possesses all rights of recovery under the '103 Patent, including the exclusive right to recover for past infringement.

13. To the extent required, Plaintiff has complied with all marking requirements under 35 U.S.C. § 287.

14. One exemplary invention claimed in the '103 Patent comprises a computer platform comprising a storage medium storing thereon instructions that performs method steps of authoring complex audiovisual products.

15. Claim 68 of the '103 Patent states:

> "68. A computing platform comprising a storage medium storing thereon computer executable instructions which when executed by the computing platform perform the steps of:
>
> creating a plurality of components representing parameterised sections of audiovisual content of a DVD-Video format datastructure, and a plurality of transitions representing movements between components;
>
> automatically expanding the plurality of components and the plurality of transitions to automatically generate a set of AV assets and an expanded datastructure of nodes and links, including expanding a component of the plurality of components to automatically generate a plurality of nodes, and expanding a transition of the plurality of transitions to automatically generate a plurality of links, where each node is associated with an AV asset of the set, the links represent

movement from one node to another and the expanded datastructure represents a navigational structure of the DVD-Video format datastructure; and

creating the DVD-Video format datastructure from the AV assets for a playback device, using the node sand links, the created DVD-video format datastructure having a navigational structure corresponding to a structure represented by the expanded datastructure." Ex. A at Col.20:3-25.

16. Claim 69 of the '103 Patent states:

"69. A computing platform comprising a storage medium storing thereon computer executable instructions which when executed by the computing platform perform the steps of:

creating a plurality of components and a plurality of transitions, where a component implicitly defines a plurality of AV assets by referring to a presentation template and to items of raw content substitutable in the presentation template, the raw content being for use in a DVD-Video format datastructure, and the plurality of transitions represent navigational movements between components; and

automatically expanding the plurality of components and the plurality of transitions to automatically generate a set of AV assets where each of the set of AV assets comprises a video object, zero or more audio objects and zero or more sub-picture objects, and to automatically generate an expanded datastructure of nodes and links, including expanding a component of the plurality of components to automatically generate a plurality of nodes, and expanding a transition of the plurality of transitions to automatically generate a plurality of links, where each node is associated with one AV asset of the set, the links represent navigational movement from one node to another and the expanded datastructure represents a navigational structure of the DVD-Video format datastructure;

creating the DVD-Video format datastructure from the set of AV assets for a playback device, using the nodes and links, the created DVD-video format datastructure having a navigational structure corresponding to a structure represented by the expanded datastructure, the navigational structure structured and arranged as executable code for the playback device, which when executed by the playback device will direct the playback of the AV assets in accordance with the navigational structure." Ex. A at Col.20:25-60.

17. As identified in the '103 Patent, prior art systems had technological faults. Ex. A at Col.1:24-27.

18. More particularly, the '103 Patent identifies that the prior art provided: "it is desired to assemble many small sections of raw audio and video content (i.e. sound clips and video clips)

to form a finished audiovisual product, by way of an authoring process. However, in many environments a considerable degree of specialist knowledge and time must be invested in the authoring process in order to achieve a desirable finished audiovisual product. These problems are exacerbated where the audiovisual product has a complex navigational structure or requires many separate raw content objects." Ex. A at Col. 1:17-27.

19. Further, "[a]lthough DVD-video discs and DVD-video players are becoming popular and widespread, at present only a limited range of content has been developed. In particular, a problem arises in that, although the DVD specification is very flexible, it is also very complex. The process of authoring content into a DVD-video compatible format is relatively expensive and time consuming. In practice, the flexibility and functions allowed in the DVD-video specification are compromised by the expensive and time consuming authoring task. Consequently, current DVD-video discs are relatively simple in their navigational complexity. Such simplicity can impede a user's enjoyment of a DVD-video disc, and also inhibits the development of new categories of DVD-video products." Ex. A at Col.1:58-Col.2:3.

20. To address this specific technical problem, Claims 68 and 69 in the '103 Patent comprises a non-abstract method for authoring of audiovisual content into a form compliant with a specification for DVD-video and able to be recorded on an optical disc recording medium. Ex. A at Col. 20:3-60.

21. Claims 68 and 69 of the '103 Patent is a practical application and inventive step of technology that address the specific computer-centric problem of when needing to author complex audiovisual products.

22. The '103 Patent indicates that one advantage of its invention of Claim 1 is a method for creating an audio-visual product having a complex navigational structure and/or having many

individual content objects, whilst reducing a time required for authoring and minimizing a need for highly skilled operators. Ex. A at Col.2:25-30.

23. The '103 Patent indicates that another advantage of its invention of Claim 1 is a method for efficiently creating audio-visual products such as DVD-video products that run on commonly available DVD-video players. Ex. A at Col.2:33-36.

24. Specifically, to overcome the computer-centric problems identified by the '103 Patent, the method of Claim 68 in the '103 patent requires (a) creating a plurality of components representing parameterised sections of audiovisual content of a DVD-Video format data structure, and a plurality of transitions representing movements between components; (b) *automatically expanding the plurality of components and the plurality of transitions to automatically generate a set of AV assets* and an expanded datastructure of nodes and links, including *expanding a component of the plurality of components to automatically generate a plurality of nodes, and expanding a transition of the plurality of transitions to automatically generate a plurality of links, where each node is associated with an AV asset of the set*, the links represent *movement from one node to another and the expanded datastructure represents a navigational structure of the DVD-Video format datastructure*; and (c) creating the DVD-Video format datastructure from the AV assets for a playback device, using the nodes and links, the created DVD-video format datastructure having a navigational structure corresponding to a structure represented by the expanded datastructure. These specific elements, as combined, accomplish the desired result of reducing a time required for authoring and minimizing a need for highly skilled operators.

25. Claim 69 of the '103 Patent includes similar specific elements as Claim 68.

26. Further, these specific elements of Claim 68 and 69 also accomplish the desired results to overcome the then existing problems in the relevant field of audio-visual systems. *Ancora*

Technologies, Inc. v. HTC America, Inc., 908 F.3d 1343, 1348 (Fed. Cir. 2018) (holding that improving computer security can be a non-abstract computer-functionality improvement if done by a specific technique that departs from earlier approaches to solve a specific computer problem). See also *Data Engine Techs. LLC v. Google LLC*, 906 F.3d 999 (Fed. Cir. 2018); *Core Wireless Licensing v. LG Elecs., Inc.*, 880 F.3d 1356 (Fed. Cir. 2018); *Finjan, Inc. v. Blue Coat Sys., Inc.*, 879 F.3d 1299 (Fed. Cir. 2018); *Uniloc USA, Inc. v. LG Electronics USA, Inc.*, 957 F.3d 1303 (Fed. Cir. April 30, 2020)

27. Claims need not articulate the advantages of the claimed combinations to be eligible. *Uniloc USA, Inc. v. LG Elecs. USA, Inc.*, 957 F.3d 1303, 1309 (Fed. Cir. 2020)

28. These specific elements of Claim 68 and 69 of the '103 Patent were an unconventional arrangement of elements because the prior art methodologies would require costly human intervention in the DVD creation. By adding the specific elements, Claim 68 and 69 of the '103 Patent was able to unconventionally generate audio-visual content. *Cellspin Soft, Inc. v. FitBit, Inc.*, 927 F.3d 1306 (Fed. Cir. 2019)

29. Further, regarding the specific non-conventional and non-generic arrangements of known, conventional pieces to overcome an existing problem, Claims 68 and 69 in the '103 Patent provides a method of gaining access to network that would not preempt all ways of creating audio-visual content because of the use of automatically expanding the plurality of components and the plurality of transitions to automatically generate a set of AV assets and an expanded datastructure of nodes and links, including expanding a component of the plurality of components to automatically generate a plurality of nodes, and expanding a transition of the plurality of transitions to automatically generate a plurality of links, where each node is associated with an AV asset of the set, the links represent movement from one node to another and the expanded datastructure

represents a navigational structure of the DVD-Video format datastructure, any of which could be removed or performed differently to permit a method creating audio-visual content in a different way. *Bascom Global Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341 (Fed. Cir. 2016); See also *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014).

30. Based on the allegations, it must be accepted as true at this stage, that Claims 68 and 69 of the '130 Patent recites a specific, plausibly inventive way of creating audio-visual content and using specific protocols rather than the general idea of automatic content creation. *Cellspin Soft, Inc. v. Fitbit, Inc.*, 927 F.3d 1306, 1319 (Fed. Cir. 2019), *cert. denied sub nom. Garmin USA, Inc. v. Cellspin Soft, Inc.*, 140 S. Ct. 907, 205 L. Ed. 2d 459 (2020).

31. Alternatively, there is at least a question of fact that must survive the pleading stage as to whether these specific elements of Claim 68 and 69 of the '130 Patent were an unconventional arrangement of elements. *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121 (Fed. Cir. 2018) See also *Berkheimer v. HP Inc.*, 881 F.3d 1360 (Fed. Cir. 2018), *cert. denied*, 140 S. Ct. 911, 205 L. Ed. 2d 454 (2020).

32. Claim 68 of the '103 Patent recites a non-abstract device that performs method steps for creating audio-visual content.

33. Claim 68 of the '103 Patent provides the practical application of a device that performs method steps for creating audio-visual content.

34. Claim 69 of the '103 Patent recites a non-abstract device that performs method steps for creating audio-visual content.

35. Claim 69 of the '103 Patent provides the practical application of a device that performs method steps for creating audio-visual content.

36. Defendant commercializes, inter alia, methods that perform all the steps recited in at least one claim of the '103 Patent. More particularly, Defendant commercializes, inter alia, methods that perform all the steps recited in Claim 68 and/or 69 of the '103 Patent. Specifically, Defendant makes, uses, sells, offers for sale, or imports a method that encompasses that which is covered by Claim 68 and/or 69 of the '103 Patent.

DEFENDANT'S PRODUCT(S)

37. Defendant offers solutions, such as the "Adobe Premiere Pro CC and Encore" system (the "Accused Product"), that enables audio-visual content creation. A non-limiting and exemplary claim chart comparing the Accused Product of Claim 68 and 69 of the '103 Patent is attached hereto as Exhibit B and is incorporated herein as if fully rewritten.

38. As recited in Claim 68, a system, at least in internal testing and usage, utilized by the Accused Product practices creating a plurality of components representing parameterised sections of audiovisual content of a DVD-Video format datastructure, and a plurality of transitions representing movements between components. See Ex. B.

39. As recited in one step of Claim 68, the system, at least in internal testing and usage, utilized by the Accused Product practices automatically expanding the plurality of components and the plurality of transitions to automatically generate a set of AV assets and an expanded datastructure of nodes and links, including expanding a component of the plurality of components to automatically generate a plurality of nodes, and expanding a transition of the plurality of transitions to automatically generate a plurality of links, where each node is associated with an AV asset of the set, the links represent movement from one node to another and the expanded datastructure represents a navigational structure of the DVD-Video format datastructure. See Ex. B.

40. As recited in another step of Claim 68, the system, at least in internal testing and usage, utilized by the Accused Product practices creating the DVD-Video format datastructure from the AV assets for a playback device, using the nodes and links, the created DVD-video format datastructure having a navigational structure corresponding to a structure represented by the expanded datastructure. See Ex. B.

41. As recited in Claim 69, a system, at least in internal testing and usage, utilized by the Accused Product practices creating a plurality of components and a plurality of transitions, where a component implicitly defines a plurality of AV assets by referring to a presentation template and to items of raw content substitutable in the presentation template, the raw content being for use in a DVD-Video format datastructure, and the plurality of transitions represent navigational movements between components. See Ex. B.

42. As recited in one step of Claim 69, the system, at least in internal testing and usage, utilized by the Accused Product practices automatically expanding the plurality of components and the plurality of transitions to automatically generate a set of AV assets where each of the set of AV assets comprises a video object, zero or more audio objects and zero or more sub-picture objects, and to automatically generate an expanded datastructure of nodes and links, including expanding a component of the plurality of components to automatically generate a plurality of nodes, and expanding a transition of the plurality of transitions to automatically generate a plurality of links, where each node is associated with one AV asset of the set, the links represent navigational movement from one node to another and the expanded datastructure represents a navigational structure of the DVD-Video format datastructure. See Ex. B.

43. As recited in another step of Claim 69, the system, at least in internal testing and usage, utilized by the Accused Product practices creating the DVD-Video format datastructure

from the set of AV assets for a playback device, using the nodes and links, the created DVD-video format datastructure having a navigational structure corresponding to a structure represented by the expanded datastructure, the navigational structure structured and arranged as executable code for the playback device, which when executed by the playback device will direct the playback of the AV assets in accordance with the navigational structure. See Ex. B.

44. The elements described in the preceding paragraphs are covered by at least Claim 68 and 69 of the '103 Patent. Thus, Defendant's use of the Accused Product is enabled by the method described in the '103 Patent.

INFRINGEMENT OF THE PATENT-IN-SUIT

45. Plaintiff realleges and incorporates by reference all of the allegations set forth in the preceding paragraphs

46. In violation of 35 U.S.C. § 271, Defendant is now, and has been directly infringing the '103 Patent.

47. Defendant has had knowledge of infringement of the '103 Patent at least as of the service of the present Complaint.

48. Defendant has directly infringed and continues to directly infringe at least one claim of the '103 Patent, namely Claim 68 and/or 69, by using, at least through internal testing or otherwise, the Accused Product without authority in the United States, and will continue to do so unless enjoined by this Court. As a direct and proximate result of Defendant's direct infringement of the '103 Patent, Plaintiff has been and continues to be damaged.

49. Defendant has induced others to infringe the '103 Patent by encouraging infringement, knowing that the acts Defendant induced constituted patent infringement, and its encouraging acts actually resulted in direct patent infringement.

50. By engaging in the conduct described herein, Defendant has injured Plaintiff and is thus liable for infringement of the '103 Patent, pursuant to 35 U.S.C. § 271.

51. Defendant has committed these acts of infringement without license or authorization.

52. As a result of Defendant's infringement of the '103 Patent, Plaintiff has suffered monetary damages and is entitled to a monetary judgment in an amount adequate to compensate for Defendant's past infringement, together with interests and costs.

53. Plaintiff will continue to suffer damages in the future unless Defendant's infringing activities are enjoined by this Court. As such, Plaintiff is entitled to compensation for any continuing and/or future infringement up until the date that Defendant is finally and permanently enjoined from further infringement.

54. Plaintiff reserves the right to modify its infringement theories as discovery progresses in this case; it shall not be estopped for infringement contention or claim construction purposes by the claim charts that it provides with this Complaint. The claim chart depicted in Exhibit B is intended to satisfy the notice requirements of Rule 8(a)(2) of the Federal Rule of Civil Procedure and does not represent Plaintiff's preliminary or final infringement contentions or preliminary or final claim construction positions.

DEMAND FOR JURY TRIAL

55. Plaintiff demands a trial by jury of any and all causes of action.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff prays for the following relief:

a. That Defendant be adjudged to have directly infringed the '103 Patent either literally or under the doctrine of equivalents;

b. An accounting of all infringing sales and damages including, but not limited to, those sales and damages not presented at trial;

c. That Defendant, its officers, directors, agents, servants, employees, attorneys, affiliates, divisions, branches, parents, and those persons in active concert or participation with any of them, be permanently restrained and enjoined from directly infringing the '103 Patent;

d. An award of damages pursuant to 35 U.S.C. §284 sufficient to compensate Plaintiff for the Defendant's past infringement and any continuing or future infringement up until the date that Defendant is finally and permanently enjoined from further infringement, including compensatory damages;

e. An assessment of pre-judgment and post-judgment interest and costs against Defendant, together with an award of such interest and costs, in accordance with 35 U.S.C. §284;

f. That Defendant be directed to pay enhanced damages, including Plaintiff's attorneys' fees incurred in connection with this lawsuit pursuant to 35 U.S.C. §285; and

g. That Plaintiff be granted such other and further relief as this Court may deem just and proper.

Dated: March 16, 2021

Respectfully submitted,

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