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10 Scale Video Coding LLC

11
12 **UNITED STATES DISTRICT COURT**
13 **CENTRAL DISTRICT OF CALIFORNIA**
14 **WESTERN DIVISION**

15
16 Scale Video Coding LLC,
17 Plaintiff,
18 v.
19 NTT Cloud Communications US Inc.
20 (d/b/a/ Arkadin),
21 Defendant.

Case No. 8:21-cv-01699

**COMPLAINT FOR PATENT
INFRINGEMENT**

DEMAND FOR JURY TRIAL

1 Plaintiff Scale Video Coding LLC (“Scale Video” or “Plaintiff”), for its
2 Complaint against Defendant NTT Cloud Communications US Inc. (d/b/a/
3 Arkadin) (“Arkadin,” or “Defendant”), alleges the following:

4 **NATURE OF THE ACTION**

5 1. This is an action for patent infringement arising under the Patent Laws of
6 the United States, 35 U.S.C. § 1 *et seq.*

7 **THE PARTIES**

8 2. Plaintiff Scale Video is a limited liability company organized under the
9 laws of the State of Delaware with a place of business at 717 N. Union Street,
10 Wilmington, Delaware 19805.

11 3. Upon information and belief, Arkadin is a corporation organized under
12 the laws of the State of Delaware with a place of business at 5 Concourse Parkway,
13 Suite 1600, Atlanta, GA 30328.

14 **JURISDICTION AND VENUE**

15 4. This is an action for patent infringement arising under the Patent Laws of
16 the United States, Title 35 of the United States Code.

17 5. This Court has subject matter jurisdiction under 28 U.S.C. §§ 1331 and
18 1338(a).

19 6. Venue is proper in this judicial District under 28 U.S.C. § 1400(b).

20 7. This Court has personal jurisdiction over Arkadin under the laws of the
21 State of California, due at least to their substantial business in California and in this
22 judicial District, directly or through intermediaries, including: (i) at least a portion
23 of the infringements alleged herein; and (ii) regularly doing or soliciting business,
24 engaging in other persistent courses of conduct and/or deriving substantial revenue
25 from goods and services provided to individuals in the State of California. Venue
26 is also proper in this District because Arkadin has a regular and established place
27 of business in this District. For instance, Arkadin has a sales, marketing, and

1 project management office in this judicial District. For example, Arkadin has a
2 sales, marketing, and project management office located at 2355 Crenshaw Blvd
3 Suite 175 Torrance, California 90501.

4 **BACKGROUND**

5 **The Invention**

6 8. Erik Van Zijst is the inventor of U.S. Patent No 11,019,372 (“the ’372
7 patent”). A true and correct copy of the ’372 patent is attached as Exhibit A.

8 9. The ’372 patent resulted from the pioneering efforts of Mr. Van Zijst
9 (hereinafter “the Inventor”)in the area of network management. These efforts
10 resulted in the development of a method and apparatus for the management of data
11 packets to support multicasting, or supporting one-to-many communication over
12 the Internet, within the last five years. At the time of these pioneering efforts, the
13 most widely implemented technology used to address network management was to
14 discard data packets that could not be immediately forwarded to the data recipient.
15 In that type of system, the data stream that is eventually received by one or more
16 receivers further down the network is corrupt and the congestion also has a
17 negative impact on communication sessions of other nodes that communicate
18 through the bottleneck router. The Inventor conceived of the inventions claimed in
19 the ’372 patent as a way to send data packets from a data source to more than one
20 receiver, ideally without putting extra stress on the network or source when the
21 number of receivers increases.

22 10. For example, the Inventor developed a method whereby receivers tell the
23 network which data streams the receivers want to receive and let the network
24 compute data distribution paths to deliver just the right packets to each receiver.
25 As an additional example, the Inventor developed a method of letting the source
26 encode the list of receivers in each data packet, thereby freeing the network from
27 the potentially computationally intensive task of maintaining multicast distribution

1 paths. As a further example, the Inventor developed a method of relying on logic
2 at the receiver by letting the network apply a broadcast mechanism whereby each
3 packet is delivered to every connected node and letting the receivers filter out only
4 those packets that are interesting.

5 **Advantage Over the Prior Art**

6 11. The patented invention disclosed in the '372 patent, provides many
7 advantages over the prior art, and in particular improved the operations of network
8 routers. (*See* '372 patent at 3:6-10.) One advantage of the patented invention is
9 that routers are given the ability to tell the network which data streams the
10 receivers want to receive and let the network compute data distribution paths to
11 deliver just the right packets to each receiver. (*See* '372 patent at 3:11-15.) Prior
12 to the patented invention, data packets would be discarded if bandwidth
13 bottlenecks prohibited the data packet from being forwarded. By allowing the
14 network to compute distribution paths, the path of the data packet could be
15 adjusted to avoid the bottleneck, allowing the data packet to be forwarded.

16 12. Another advantage of the patented invention is the method of a source
17 delivering data packets to all receivers and allowing the receivers to filter out only
18 the packets needed at the receiver. (*See* '372 patent at 3:20-24.) While this places
19 a heavy initial load on the network, bottlenecks are avoided because the flow of
20 data packets over the distribution paths is constant and the network need not
21 compute different data paths based on the an increase in the number of receivers.

22 13. Because of these significant advantages that can be achieved through the
23 use of the patented invention, Scale Video believes that the '372 patent presents
24 significant commercial value for companies like Arkadin. Indeed, Arkadin's
25 businesses engage heavily in the transfer of data packets over the Internet on at
26 least a national scale, representing a significant commercial investment for
27 Arkadin.

1 **Technological Innovation**

2 14. The patented invention disclosed in the '372 patent resolves technical
3 problems related to network management, particularly problems related to the
4 utilization of video routers support multicasting data packets. As the '372 patent
5 explains, one of the limitations of the prior art as regards network management was
6 that when a bandwidth bottleneck is reached, a video router discards the packets
7 that cannot immediately be forwarded. This causes two problems. The data stream
8 that is eventually received by one or more receivers further down the network is
9 corrupt and the congestion also has a negative impact on communication sessions
10 of other nodes that communicate through the bottleneck router. (See '372 patent at
11 1:59-65.)

12 15. The claims of the '372 patent do not merely recite the performance of
13 some well-known business practice from the pre-Internet world along with the
14 requirement to perform it on the Internet. Instead, the claims of the '372 patent
15 recite inventive concepts that are deeply rooted in engineering technology, and
16 overcome problems specifically arising out of how to manage the transfer of data
17 packets over a network.

18 16. In addition, the claims of the '372 patent recite inventive concepts that
19 improve the functioning of video routers, particularly a video router's ability to
20 communicate with a network or filter data packets transferred over a network to
21 remove unimportant packets.

22 17. Moreover, the claims of the '372 patent recite inventive concepts that are
23 not merely routine or conventional use of data packet management. Instead, the
24 patented invention disclosed in the '372 patent provides a new and novel solution
25 to specific problems related to improving a network's ability to multicast data
26 packets to one or more receivers over a network with limited bandwidth capacity
27

1 and decreasing the number of data packets discarded when network bandwidth
2 bottlenecks are reached.

3 18. And finally, the patented invention disclosed in the '372 patent does not
4 preempt all the ways that video routers may be used to improve network
5 management, nor does the '372 patent preempt any other well-known or prior art
6 technology.

7 19. Accordingly, the claims in the '372 patent recite a combination of
8 elements sufficient to ensure that the claim in substance and in practice amounts to
9 significantly more than a patent-ineligible abstract idea.

10 **COUNT I – INFRINGEMENT OF U.S. PATENT NO. 11,019,372**

11 20. The allegations set forth in the foregoing paragraphs 1 through 19 are
12 incorporated into this First Claim for Relief.

13 21. On May 25, 2021, the '372 patent was duly and legally issued by the
14 United States Patent and Trademark Office under the title “LAYERED
15 MULTICAST AND FAIR BANDWIDTH ALLOCATION AND PACKET
16 PRIORITIZATION.”

17 22. Scale Video is the assignee and owner of the right, title and interest in
18 and to the '372 patent, including the right to assert all causes of action arising
19 under said patent and the right to any remedies for infringement of it.

20 23. Upon information and belief, Arkadin has and continues to directly
21 infringe one or more claims of the '372 patent by selling, offering to sell, making,
22 using, and/or providing and causing to be used products, specifically one or more
23 cloud communications services, which by way of example include Cloud Unified
24 Communications, Cloud Voice, and Digital Events (*See, e.g.*,
25 www.arkadin.com/solutions (last accessed October 10, 2021)) (the “Accused
26 Instrumentalities”).

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

Dated: October 13, 2021

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