EXHIBIT 2090

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Aylo Freesites Ltd.,
Petitioner

v.

DISH Technologies L.L.C.,
Patent Owner.

IPR2024-00146,
IPR2024-00043,
IPR2024-00044,
IPR2024-00045,
IPR2024-00046.
Attorney Docket No.: 081841.0167

DECLARATION OF DAVID R. ERICSON IN SUPPORT OF DISH TECHNOLOGIES L.L.C.'S PATENT OWNER RESPONSES

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I, David R. Ericson, declare as follows:

1. I make this declaration based upon my own personal knowledge and, if called upon to testify, would testify competently to the matters stated herein.

2. I am not being compensated for providing this declaration, and I have no financial interest in the resolution of this matter.

3. This declaration is about MOVE Networks, Inc. ("MOVE"); my prior involvement with MOVE and its successor entities; and the successful adaptive-bitrate streaming products and systems developed at MOVE and subsequently at EchoStar and Sling.

4. I have previously provided sworn deposition testimony regarding the development, testing, and use of MOVE's adaptive-bitrate streaming technology between 2005 and 2007 in *In Re Certain Fitness Devices, Streaming Components Thereof, and Systems Containing Same*, Inv. No. 337-TA-1265.

5. I understand that DISH submitted an excerpt of my deposition testimony in this proceeding as Exhibit 2063. I have reviewed Exhibit 2063 and certify that it is accurate. I incorporate those statements fully into this declaration.

6. I have an undergraduate degree from Brigham Young University in broadcast media management. In all, I have approximately twenty-five years of working experience in the computer field, approximately eighteen of which involve video streaming. A copy of my resume is attached as Exhibit 2089.

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7. Of my decades of experience in the streaming field, I have spent over two decades in executive leadership roles. In these roles, I have overseen the development and launch of several award-winning products and emerging technologies. EX2089.

8. For instance, as a founding executive at Sling TV, a former Executive General Manager, a Vice President of Technology Architecture & Development, and a Vice President of Operations for EchoStar and DISH Digital, I oversaw the development and operation of the first vMVPD and Live Over The Top ("OTT") Television Streaming Service: Sling TV. Sling TV earned a Technology & Engineering Emmy® Award for "Pioneering Development of Large Scale, Cloud Served, Broadcast Quality, Linear Channel Transmission." EX2013.

9. As Vice President of Solutions Engineering and Vice President of Operations at MOVE, I helped MOVE develop the first adaptive streaming Online Video Platform ("OVP") and OTT content distribution platform, which laid the foundation for programmers such as ABC, ESPN, FOX, CWTV, Discovery, Televisa, and more to be able to offer their videos via streaming.

10. And, in senior executive product and engineering roles at I-Link, Inc., I oversaw the design, engineering, and operations of the first-to-market Voice-Over-IP ("VoIP") interexchange ("IXC") network in the United States as well as the

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development of I-Link's award-winning VoIP softswitch and unified communications platform.

11. Through my decades of experience in the field, I also have substantial familiarity with the industry, including the technical and operational features of other products services. For example, while I was the Vice President of Operations at EchoStar, I oversaw all of the company's technical operations and productions processes, including the encoding of content, the packaging of transport streams into formats compatible with various streaming standards (*e.g.*, HLS, MPEG-DASH, MOVE's QVT/QMX, DRM), the distributing of content, the changing/releasing of any software, and more.

12. I first joined MOVE as a Vice President of Operations in March 2006 after working at I-Link. When I joined MOVE, the company consisted of sixteen employees.

13. As Vice President of Operations at MOVE, my responsibilities included managing the day-to-day engineering and technical operations staff. In this role, I additionally oversaw the development of MOVE's adaptive bitrate-streaming technology, which I understand is disclosed in the ABR Patents.

14. At that time I joined MOVE, the state of MOVE's technology included the ability to perform adaptive-bitrate streaming through a browser-based plug-in for Internet Explorer. Around that same time and later, MOVE was attempting to scale

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its operation to prove that people could use MOVE's adaptive-bitrate streaming technology to stream videos from anywhere in the world. MOVE also sought to ensure that tens of thousands of people could pull the same files at the same time to watch the same event.

15. For example, MOVE's adaptive-bitrate streaming technology was used in the October 2006 and October 2007 General Conferences for the Church of Jesus Christ of Latter-Day Saints. EX2063.

16. MOVE's adaptive-bitrate streaming technology proved to be commercially successful as well. In fact, in my role as Vice President of Operations at MOVE, I assisted with providing MOVE's adaptive-bitrate streaming technology to notable content providers. For example, between March 2006 and December 2009, I was responsible for deploying and providing streaming services and platforms on behalf of customers, including Disney, FOX, and Discovery.

17. I understand that MOVE also met with other companies, including Apple and Microsoft, who expressed interest in MOVE's technology.

18. Ultimately, in February 2009, Microsoft announced that it was launching a beta version of its adaptive-bitrate streaming solution, Smooth Streaming. Like MOVE's adaptive-bitrate streaming solution, Smooth Streaming offered HTTP-based adaptive streaming with the aims of minimizing buffering,

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reducing start-up times, and adapting the quality of a video stream during a presentation based upon an end user's network connection with server infrastructure.

19. In June 2009, Apple similarly announced that it too would be promulgating a proposed standard for adaptive-bitrate streaming that enabled streaming over an HTTP connection. *See* EX2036. This proposed standard became known as HTTP Live Streaming, or "HLS," and it reflected Apple's attempt to embrace the strong market demand for adaptive-bitrate streaming, a technology "brought to the fore by Move Networks." EX2036.

20. As I discussed above, I became familiar with these various streaming solutions in my executive leadership roles with MOVE, EchoStar, and DISH Digital. In particular, my duties included ensuring that video programs offered on customer platforms could be delivered to end users, which required us to convert video programs to conform to non-MOVE standards such as HLS.

21. Given my understanding of the technology developed at MOVE, and my decades of experience in the video streaming industry, and my years of working with various streaming standards, I found that HLS is, as a proposed standard, very similar to the technology MOVE had already developed and implemented.

22. For example, like MOVE's adaptive-bitrate technology, HLS purports to offer end users a streaming experience with minimal buffering that provides the highest supportable-quality segments of video program. *See* EX2036.

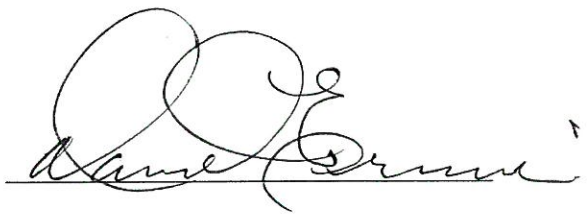
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23. Further, HLS's use of transport stream (".ts") and manifest files closely resembles MOVE's use of QSS and QMX files, respectively. For example, like MOVE's QSS files, HLS's .ts files were streamlets of a particular portion of a video program encoded at a particular bitrate. *See* EX2063 at 39:21-23. And, like MOVE's QMX files, HLS's manifest files provide a way of time indexing the video encoded segments. *See id.* at 39:18-21.

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All statements made herein of my own knowledge are true, and all statements made on information and belief are believed by me to be true. I further understand that willful false statements and the like are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code. I declare under penalty of perjury that the foregoing is true and correct.

Executed in Provo, Utah on August 6, 2024



David R. Ericson

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