

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

FUBOTV MEDIA, INC. & YANKA INDUSTRIES, INC.,
Petitioners,

v.

DISH TECHNOLOGIES L.L.C.,
Patent Owner.

IPR2024-00917
IPR2024-00918
IPR2024-00919

AYLO FREESITES LTD,
Petitioner,

v.

DISH TECHNOLOGIES L.L.C.,
Patent Owner.

IPR2024-00940

Attorney Docket No.: 081841.0227

**DECLARATION OF GREGORY SMITH IN SUPPORT OF
PATENT OWNER RESPONSE**

I, Gregory Smith, hereby declare as follows:

1. I am an independent consultant with over 26 years of experience in technologies related to media streaming. I have been retained on behalf of DISH Technologies L.L.C. (“Patent Owner” or “DISH”), as a consultant regarding MOVE Networks, Inc. (“MOVE”) to discuss MOVE and the activities related to my previous employment at MOVE.

2. As part of this work, I have also been requested by counsel for DISH to recount my personal experience with MOVE Networks, Inc. (“MOVE”), for which I was previously the Chief Technology Officer between 2001 and 2004 and then again from 2007 to 2009. I have previously provided testimony concerning MOVE’s adaptive bitrate (“ABR”) streaming technology, notably in connection with *In re Certain Fitness Devices, Streaming Components Thereof, and Systems Containing the Same*, Inv. No. 337-TA-1265, at the International Trade Commission. A true and correct copy of my deposition testimony is attached as Exhibit 2132.

3. I am being compensated at \$300 per hour for my services in this matter. My compensation is not dependent upon the outcome of this matter. If called upon to do so, I am prepared to testify as a witness in this regard.

4. As part of my role with MOVE, I became intimately involved with MOVE’s technology, the company’s developers, and the company’s business development efforts. I directly reported to John Edwards, who was MOVE’s CEO; worked closely with MOVE’s sales team; and I managed small teams of developers, including Mark Hurst and David Brueck. I also worked with Drew Major, who was MOVE’s founder and initial investor. Together, Messrs. Hurst, Brueck, and Major were the named inventors for patent applications on MOVE’s ABR streaming technology.

5. In 2003, following a meeting with EyeWonder, a boutique advertising agency with which MOVE had a contract to deliver in-page video advertisements, Mr. Major discussed his inventive

concept of using streamlets and the use of multiple Transmission Control Protocol (“TCP”) sessions to retrieve portions of multi-media content. EX2011, at 30. Streamlets enabled the ability to perform fast start up, quick responses to scrubbing within the multimedia content, adaptability to multiple bitrates to address changing network conditions, and moving the logic from the video servers to the client device. EX2011, at 29, 32. Additionally, moving the logic from the server to the client significantly improved the scalability of the ABR streaming technology and could quickly and inexpensively scale to support streams to millions of viewers. I recall being particularly impressed by this realization because streaming technologies at that time could not scale because they required expensive and specialized media servers. EX2011 at 37-38.

6. While the inventors were developing the ABR streaming technology, I worked closely with other organizations that wanted to implement or integrate MOVE’s ABR streaming technology into their own technologies. For example, I was trying to find and secure agreements with partners who could provide content like ABC/Disney or distribution networks like Level 3. Much of that work involved protecting MOVE’s intellectual property through the negotiation of non-disclosure agreements. MOVE signed non-disclosure agreements with Apple in 2006 and 2009 (EX2065 & EX2066, respectively); with Microsoft in April 2007 (EX2060); and exchanged a similar agreement with Akamai in May 2007.

7. I was also involved with demonstrations of MOVE’s technology, and together with my team, we convinced partner organizations to use MOVE’s technology. As part of our business efforts, we regularly corresponded with other companies via e-mail, and I kept records of my e-mails with other companies. These email records were made and kept in the course of regularly conducted business activity for MOVE. Email records were of the type of records that MOVE routinely made and kept in the course of business, in the business’s usual practice. The dates on

the e-mail records confirm that the records were made at or near the time of the events described in the e-mails and stored on storage space such as laptops, shared drives, or other storage for MOVE. I have personal knowledge of the content of the e-mails, either by sending the e-mail and being the author or receiving the e-mail as one of the recipients. True and correct copies of those e-mails are submitted as Exhibits 2041, 2042, 2043, 2081, 2088, 2089, 2091, 2104, 2105, 2106, 2108, 2109, 2110, 2111, 2116, 2117, 2118, and 2119. All of these e-mails were kept in the ordinary course of MOVE's business, and all were sent or received nearly contemporaneous with our business meetings.

8. Some of our earliest meetings and demonstrations were with companies like CBS (FOX, A&E, Akamai but as a distribution network client. Our earliest clients were particularly interested our products because the state-of-the-art solutions at that time (such as RealNetworks) struggled with broadcasts that were “too choppy and too fuzzy, with a viewing window far too small to enjoy.” EX2103. I am familiar with this document and numerous other press releases that accurately describe the issues with streaming media at the time, MOVE's commercial success, and the impact MOVE had on the industry. True and accurate copies of those press releases or articles—many of which I reference in this declaration—are included as Exhibits 2031, 2032, 2033, 2034, 2035, 2037, 2038, 2039, 2040, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2054, 2055, 2057, 2062, 2070, 2074, 2075, 2076, 2080, 2082, 2083, 2084, 2085, 2086, 2087, 2092, 2103, 2112, 2113, 2114, and 2112.

9. One of MOVE's earliest and biggest clients was ABC/Disney. Up until 2006, ABC had been using Flash to support streaming on its website, but my team and I had convinced ABC to try out our technology. We showed ABC that other streaming services, like YouTube, were focused on inferior technologies like progressive downloading, which suffered from slow load times, low

resolutions, and discontinuous playback. MOVE's ABR technology, on the other hand, provided ABC with incredibly crisp and clean HD video content with fast start-up times. EX2034; EX2044. One of the supporters of our initial efforts with ABC was Skarpi Hedinsson, the former VP of technology for ABC Digital Media. Mr. Hedinsson was "very happy to be off Flash" and even advocated for MOVE to present to his boss at Disney, the then-CEO Bob Iger, as well as other technology companies like Apple. EX2104; EX2105. Steamboat Ventures, Disney's investment arm, invested millions of dollars into MOVE. EX2034.

10. I also worked closely with Level 3. Level 3 is a content delivery network that offered lower distribution costs for the data files which comprised the streaming media. Mark Taylor and the other members of the Level 3 executive team were highly impressed with our initial demonstrations of MOVE's technology. In fact, after our presentation to his team, Mark asked me: "why are the current streaming protocols broken? There is enough bandwidth but they cannot get the results you do." EX2041. Level 3 subsequently decided to invest \$6 million in MOVE.

11. As I mentioned above, I also worked closely with Microsoft to implement MOVE's ABR streaming with Microsoft's Silverlight technology. One of our earliest meetings was in early June 2007, when Microsoft invited me and John Edwards (MOVE's then-President and CEO) to Redmond, Washington to meet with Microsoft personnel for discussions about how MOVE's ABR streaming technology could benefit each group "both from a business and technology perspective." EX2042, at 3. At the time, Microsoft expressed skepticism about streaming high-definition video content over the Internet using standard HTTP communication requests because it had been focused on specific implementations using, for example, its Microsoft Media Servers, where intelligence for streaming is on the server, rather than the client. EX2022, at 32, 36.

12. Following that meeting with Microsoft, who was also trying to develop and encourage adoption of its Silverlight technology, I worked closely with Chris Carper, who oversaw the business development of Microsoft's Silverlight browser plug-in. *See, e.g.*, EX2042. At that time, Microsoft did not support "dynamic changes in resolution at runtime," meaning it could not support a switch between different resolutions during a given stream, and, as a result, did not support ABR streaming. EX2043. In contrast, MOVE's ABR streaming technology could "seamlessly adjust[] image quality to fit available bandwidth on each viewer's Internet connection" to enable "a high-quality Internet television viewing experience." EX2070; EX2112. We found a temporary solution for Microsoft in which a separate window could be filled with video received and processed by MOVE's client and display that media in an adaptive fashion with Silverlight's environments. EX2106; 2107.

13. MOVE's collaboration was a huge success. After its positive experience, Microsoft agreed to invest \$5 million in MOVE and sought to piggyback our success by requesting that its Silverlight software be installed alongside MOVE's player EX2060. Following its investment in MOVE, Microsoft announced its "strategic partnership" with the hopes that the "combination of Microsoft and Move Networks' technologies" would allow "users to experience high-quality, skip-free Internet television programming." EX2070; EX2112; *see also* EX2055; EX2092; EX2113. Part of the strategic alliance also included both a Joint Marketing Agreement and an agreement of a Right of Notice and Negotiation between Microsoft and MOVE. *See, e.g.*, EX2108. Microsoft announced its collaboration with MOVE at its 2008 web developer and designer conference, MIX08, where it showcased MOVE's product as an upcoming web technology. EX2055. After MIX08, Microsoft invited MOVE to attend Advance, Microsoft's internal trade show directed to advertising, business, entertainment, and communication. EX2089.

14. In addition to wanting access to MOVE's clientele, like ABC/Disney, Microsoft also sought to leverage MOVE's success to find new clients. For example, one such opportunity was to support the British Broadcasting Company's ("BBC") iPlayer. EX2109. The BBC's iPlayer had previously been implemented in Flash, but the BBC was disappointed with the iPlayer's performance, prompting the BBC's interest in MOVE's player. Microsoft also planned to work with MOVE to support Sky's SkyPlayer and requested that MOVE support a demonstration of a "full featured player" for the 2008 National Association of Broadcasters ("NAB") Conference. EX2110; EX2111; EX2113.

15. In its biggest and most successful collaboration with both Microsoft and Level 3, MOVE streamed the 2008 Democratic National Convention ("DNC"). Microsoft called this a "technological success" and the "first large demonstration of the integration of Move Networks and Silverlight," further commenting that the event was "tremendously popular, with visitors to the official convention Web site viewing more than 350,000 hours of video." EX2070; EX2112.

16. We received a number of complimentary reviews of the performance of MOVE's technology at the 2008 DNC. *See, e.g.*, EX2091. By February 2009, MOVE had streamed hundreds of live events, including sporting events for the NFL and ESPN, concerts, and Oprah's Book Club. Our customers included Fox, ABC, The CW, Televisa, Comcast, ProSieben, BYU TV, and others. EX2114. In addition to the investments from Level 3, Steamboat Ventures, and Microsoft, MOVE had received additional investments from Hummer Winblad Venture Partners; Comercio Mas, a Televisa affiliate; Comcast; and Cisco.

17. Apple again contacted MOVE after the DNC to "find a way to work together" to implement changes into the iPhone architecture to support our ABR streaming technology. EX2116; EX2117. As I mentioned above, we had previously met with Apple and signed a mutual NDA in November

2006. EX2065. We met again in June 2007, when Apple TV supported only progressive download forms of streaming, so we could present the benefits of our ABR streaming technology. EX2105. We were also in contact with Apple in mid-2008 when Apple made it clear that it had no intentions to support Flash on its devices. EX2118; EX2119. Despite another signed NDA with Apple in March 2009, Apple instead announced its own adaptive streaming standard that is remarkably similar to our technology. EX2066; EX2046.

18. I reserve the right to supplement and/or amend my testimony in response to any positions taken by Petitioner and/or its witnesses in reports, declarations, affidavits, or testimonies whether in response to my testimony or in amendment to their previous reports and testimonies to the extent such positions are relevant to the subject matter I have addressed herein.

19. I declare under I declare under penalty of perjury that the foregoing is true and correct.

Signature: 
Gregory Smith

Executed On February 26, 2025 at Austin, TX