

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

FOX TELEVISION STATIONS, INC., et al.

CIVIL ACTION NO. 1:13-cv-00758 (RMC)

Plaintiffs/Counter-Defendants,

v.

FILMON X, LLC, et al.

Defendants/Counter-Plaintiffs.

DECLARATION OF MYKOLA KUTOVYY

I, Mykola Kutovyy, declare:

1. I submit this declaration in support of FilmOn X, LLC's ("FilmOn X's") Opposition to Plaintiffs' Motion for a Preliminary Injunction. I have personal knowledge of the facts set forth herein and, if called as a witness, I could and would testify competently thereto.

I. FilmOn's Business; My Background and Role

2. I am the Chief Technology Officer ("CTO") of FilmOn TV Networks, Inc. ("FilmOn").

3. I hold a degree from Odessa National University, with a specialty in computer science. For over 14 years, I worked in programming, project management and systems administration at technology companies, with a focus on securing networks and developing software architecture. In September 2012, I became FilmOn's CTO, and am responsible for implementing and managing FilmOn's technology.

4. FilmOn is a privately owned company, based in the United States with some operations and staff located overseas.

5. FilmOn provides high-definition ("HD") subscription-based television services to internet protocol ("IP")-enabled devices including televisions, set-top boxes, personal computers,

mobile phones, and tablets. FilmOn offers direct subscription packages with access to over a hundred television channels, premium movie channels, pay-per-view channels, as well as over 2.000 video on demand titles. FilmOn also provides some free content in standard definition (“SD”) format.

6. FilmOn’s services are provided across a proprietary delivery platform connected to datacenters in London, Geneva, New York and Los Angeles.

II. FilmOn’s Remote DVR Technology Described

7. FilmOn has technology which utilizes multiple routers, servers, adapters and equipment (i.e., antenna, tuner, transcoder) to transmit broadcast programming from television into internet format.

A. Parts of the System

8. At the core of the system are mini antennas, each no larger than the size of a dime and spaced about six (6) inches apart on a board.

9. The antennas are either privately owned by the user (through purchase from FilmOn or provided free with a year-long subscription in the United States) or dynamically allocated, remotely, by FilmOn.

10. The antenna router performs general antenna slots management, by determining a free adapter, setting up tasks for tuning and encoder servers to handle specific channels, and scheduling asynchronous events for web UI (or “user interface”).

11. The tuner server connects ATSC (“Advanced Television Systems Committee”) adapters with the mini antennas for fetching off air data.

12. The encoder server performs video/audio data transcoding into a format suitable for Internet delivery and/or a format supported by endpoint devices such as iPhone, iPad, Android, and STB devices.

13. The distribution endpoint is a server or group of servers for end user data delivery.

14. The encoder server publishes data to the distribution endpoint.

B. How the System Works

15. The user initiates a request to a web server by clicking on a channel using any client application such as the filmonx.com website or applications for mobile devices.

16. The web server generates the request for a specific channel to the antenna router.

17. The user will then see the “Connecting to antenna” message while a free antenna is being selected and tuned to a selected channel's frequency band.

18. The antenna router processes the request, determining the first free antenna adapter and scheduling a request to tune the selected channel. The system is designed so that no two users are assigned to one antenna at the same time.

19. The antenna router determines a free encoder slot and sets up a tuner server to send the data to the selected encoder where the unique directory is created and assigned to a user. The system is designed so that each user has his or her own unique directory and does not share with any other user.

20. Once the user’s unique directory is created the data is taken from the antenna and processed through the tuner server and then the encoder server. In this process, the data goes through encoding for an internet delivery format saved to that unique directory (for possible later seek request) and is transmitted to the user through the distribution endpoint.

21. All saved data is removed when the user disconnects.

22. The antenna router prepares the reply which contains the distribution server URI and stream name.

23. The tuner server fetches channel information and sets up a hardware adapter to fetch the TS (or “terminal services”) of specified service from specified TP (or “transport protocol”).

24. All received data from a user’s antenna is sent by tuner process to the encoder server. During the process, the tuner server checks data validity to detect errors or signal losses to raise appropriate events.

25. The tuner server analyzes PSIP (“program and system information protocol”) tables in the tuned signal and fills in channel EPG (“electronic program guide”) tables for web UI.

26. The encoder server performs data transcoding and places a FilmOnX watermark before saving to the hard drive in a unique user directory.

27. The newly created stream from the files saved to the directory is published over RTMP (or “real time message protocol”) to the distribution endpoint.

28. The website or application UI receives an asynchronous reply with stream URL for playback or error replies in case of any errors.

29. When the user finishes viewing the channel (with options to stop, pause, close application, switch channels, etc) the web UI generates a "stop" request to the antenna router to stop fetching data and free up the antenna device and encoder slot. The unique directory and files are then removed.

30. FilmOn does not make any quality control copy or any other copy not specifically requested by a particular user. Similarly, FilmOn does not allow any user to view any content requested by anyone but that particular user.

31. The distribution endpoint monitors all connections and frees unused connections/slots.

C. The User’s Experience Accessing FilmOn for Remote DVR Services

32. The user or FilmOn customer’s experience when watching any local channel is as follows.

33. The user starts by opening any authorized FilmOn.com “client application,” including HDi Player, a website like filmonx.com, the FilmonTVPlus application for iOS, LiveTV application for Android, etc.

34. When the customer clicks on any local channel offered through the client application, it requests a unique, dedicated video stream from Filmon.com. The client application then shows a message such as “Loading video stream” or “Connecting antenna”


while displays while the web service issues a unique antenna stream and tunes the channel frequency.

35. This process may take up to a few minutes, during which the customer sees the message “We are connecting your antenna.”

36. After the antenna is connected, static image changes are relayed to the user through a dedicated antenna and unique user directory.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed on August 15, 2013, at LONDON UK

By  _____
Mykola Kutovyy