UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLUMBIA

v-00453-RMC
. NT/A
<u>:</u> N/A

DECLARATION OF PATRICK ACHACHE IN SUPPORT OF PLAINTIFF'S
STATEMENT OF GOOD CAUSE AS TO WHY DEFENDANTS 2 THROUGH 4,577
SHOULD NOT BE DISMISSED FOR MISJOINDER UNDER RULE 20 OF THE
FEDERAL RULES OF CIVIL PROCEDURE

I, Patrick Achache, declare:

- 1. I am Director of Data Services for Guardaley, Limited ("Guardaley"), a company incorporated in England and Wales under company number 06576149. Guardaley is a provider of online anti-piracy services for the motion picture industry. Before my employment with Guardaley, I held various software developer and consultant positions at companies that developed software technologies.
- 2. The manner of the illegal transfer of Plaintiff's movie by Doe Defendants in this case has been through a "BitTorrent protocol" (or "torrent"), which is significantly different in its architecture than the older peer-to-peer (P2P) network protocols used by such networks as Napster, Grokster, Kazaa, Limewire, and Gnutella.
- 3. One difference in the services is how they locate and trade bits of the files. Napster, Grokster, Kazaa, Limewire, Gnutella, etc. are file sharing networks. Through a series of nodes, infringers are interconnected to a variety of people sharing a variety of files. Most of the time

they send out a search request along the network and people who have files that meet the search criteria answer back that they have it. Then an individual will pick one of the search results and start getting bits of the file from that particular person who has some available bandwidth for transferring of the file.

- 4. BitTorrent, on the other hand is file-focused. Someone who has a copy of the file creates a tracker and makes it available. Rather than finding that tracker by sending out search requests along a file sharing network, infringers find it on web sites, via recommendations in chat rooms, in links posted to mailing lists, etc. Then everyone interested in sharing that specific file (either providing a copy they already downloaded or getting a copy) can use the tracker to essentially create a network dedicated to sharing just that specific file.
- 5. The primary characteristic of BitTorrent is the notion of torrent, which defines a session of transferring a single file to a set of peers. Peers involved in a torrent cooperate to replicate the file among each other using swarming techniques. A user joins an existing torrent by downloading a ".torrent" file and adding it to its client. This file contains meta-information on the file to be downloaded, e.g., the number of pieces, the SHA-1 hash values of each piece, and the IP address of the so-called tracker of the torrent. The tracker is the only centralized component of BitTorrent, but it is not involved in the actual distribution of the file. It only keeps track of the peers currently involved in the torrent and collects statistics on the torrent. When joining a torrent, a new peer asks the tracker for a list of IP addresses of peers to connect to and cooperate with, typically 50 peers chosen at random in the list of peers currently involved in the torrent. This set of peers forms the peer set of the new peer. The group of peers will share the file among each other. Each peer knows what pieces each other peer in its peer set has, and each peer helps the other to fulfill the completion of the file.

6. If a file is observed directly after its release, the network size increases from a few users to the maximum amount in which all users are potential uploaders for the respective file. Within a small network, and depending on the upload bandwith of each user and the size of the file shared, the plausibility that each user downloaded a part from each other is very high. For example, on the December 7, 2009 Guardaley found the following IP addresses sharing the same file with the same hash, same name, same file size, and operating over the same ISP (Time Warner Cable) with not more than five hours between them:

IP address	Date /Time	Hash
76.180.190.xx	12.7.09 01:27:48 AM	VCOAJNASXAB5YWOBRHWON6ENETWI3X4O
76.180.190.xx	12.7.09 01:21:40 AM	VCOAJNASXAB5YWOBRHWON6ENETWI3X4O
74.74.160.xx	12.7.09 02:36:36 AM	VCOAJNASXAB5YWOBRHWON6ENETWI3X4O
24.27.108.xx	12.7.09 05:43:41 AM	VCOAJNASXAB5YWOBRHWON6ENETWI3X4O

All those infringers only had one specific file in connection: Far Cry 2008 DvdRip ExtraScene RG.avi. The next day Guardaley found additional collaborating IP addresses:

76.90.215.xx	12.8.09 12:07:55 AM	VCOAJNASXAB5YWOBRHWON6ENETWI3X4O
75.87.229.xx	12.8.09 12:36:10 AM	VCOAJNASXAB5YWOBRHWON6ENETWI3X4O
71.70.220.xx	12.8.09 12:03:58 AM	VCOAJNASXAB5YWOBRHWON6ENETWI3X4O
72.129.230.xx	12.8.09 03:25:14 AM	VCOAJNASXAB5YWOBRHWON6ENETWI3X4O
24.164.77.xx	12.8.09 05:46:16 PM	VCOAJNASXAB5YWOBRHWON6ENETWI3X4O
72.185.83.xx	12.8.09 03:53:29 AM	VCOAJNASXAB5YWOBRHWON6ENETWI3X4O
24.74.190.xx	12.8.09 11:30:09 AM	VCOAJNASXAB5YWOBRHWON6ENETWI3X4O

Seeing the whole structure of the infringers from other ISPs sharing the same file with the same

hash value, it indicates that all of those individuals must have searched for this file on a website

like isohunt, mininova, the pirate bay, etc., and they all chose the same file: Far Cry 2008

DvdRip ExtraScene RG.avi, file size in 701.4 MB.

7. Overall, there are a limited number of files of Plaintiff's movie available on

BitTorrent protocols. The data already obtained by Guardaley could be completely analyzed by

an external expert, but such analysis would take at least 10 to 14 business days.

I declare under penalty of perjury under the laws of the United States that the foregoing is true

and correct.

Executed on June 21, 2010 at the United States of America.

Patrick Achache

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