

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

EXHIBIT A

1 Brett L. Gibbs, Esq. (SBN 251000)
2 Of Counsel to Prenda Law Inc.
3 38 Miller Avenue, #263
4 Mill Valley, CA 94941
5 415-325-5900
6 blgibbs@wefightpiracy.com

7 *Attorney for Plaintiff*

8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
IN THE UNITED STATES DISTRICT COURT FOR THE
CENTRAL DISTRICT OF CALIFORNIA

INGENUITY13 LLC,
Plaintiff,
v.
JOHN DOE,
Defendant.

Case No. 2:12-cv-8333-SVW(PJWx)
**DECLARATION OF PETER
HANSMEIER IN SUPPORT OF
PLAINTIFF'S *EX PARTE*
APPLICATION FOR LEAVE TO
TAKE EXPEDITED DISCOVERY**

I, Peter Hansmeier, declare under penalty of perjury as true and correct that:

1. I am a technician at 6881 Forensics, LLC ("6881").
2. On behalf of its clients, 6881 monitors and documents Internet-based piracy of our clients' copyrighted creative content. 6881 utilizes a system of software components conceptualized, developed, and maintained in order to collect data about unauthorized distribution of copies of copyrighted works. As a technician at 6881, I am responsible for implementing day-to-day piracy monitoring. I submit this declaration in support of Plaintiff's *Ex Parte* Application for Leave to Take Expedited Discovery.
3. Plaintiff and other similarly situated companies contract with 6881 to have 6881 determine whether or not copies of their works are being distributed on the Internet without their permission and to identify infringers. Plaintiff is the exclusive rights holder of the right to distribute and reproduce certain copyrighted creative

1 content via the BitTorrent protocol. Plaintiff’s unique copyrighted work at issue in
2 this case is an adult video entitled “A Peek Behind the Scenes at a Show” (hereinafter
3 “Video”).

4 **Background**

5 4. Piracy is the unauthorized copying and/or distribution of copyrighted
6 materials. Piracy of creative works (i.e., songs and motions picture) has been a
7 serious problem since at least as early as home audio and video tape cassette players
8 became popular. The problem continued with the introduction of home CD and DVD
9 players. Today the problem persists with the ability to store digital file and of songs
10 and motion pictures in the memory of home and/or laptop computers, and for people
11 to distribute such file to each other over the Internet on peer-to-peer networks using
12 file sharing software applications. An articles describing aspects of piracy can be
13 found at this web page, among others, on the Internet (last checked October 5, 2012):
14 [http://www.thefreelibrary.com/DVD+piracy+in+the+U.S.+becomes+an+industry-](http://www.thefreelibrary.com/DVD+piracy+in+the+U.S.+becomes+an+industry-a0103403775)
15 [a0103403775](http://www.thefreelibrary.com/DVD+piracy+in+the+U.S.+becomes+an+industry-a0103403775)

16 5. Over the past decade, the ease of creating exact digital reproductions of
17 copyrighted albums, audiovisual works, software, photographs and other forms of
18 media has increased dramatically. Indeed, a significant amount of content, including
19 Plaintiff’s copyrighted file, is published exclusively in digital format, which increases
20 the public’s access to digital reproductions. While access to digital reproductions of
21 copyrighted media has increased, the costs of digital storage capacity and Internet
22 bandwidth have fallen precipitously. The combination of increased access to digital
23 content and the lower costs of storage and transmission of that content over the
24 Internet have created a situation ripe for systemic Internet-based content piracy.

25 6. A development that heralded the arrival of wide scale Internet-based
26 piracy was the introduction of modern peer-to-peer file transfer protocols. Under
27 earlier file transfer protocols, users downloaded data directly from a central server.
28 The rate of data transmission provided by a central server would slow dramatically

1 when the large numbers of users requested data simultaneously. Moreover, central
2 servers that distributed pirated content were vulnerable to legal injunctions.

3 7. Modern peer-to-peer file transfer protocols substantially avoid these
4 problems by allowing each data-seeking user to both upload to and download from
5 other data-seeking users without the material assistance of a robust central server. In
6 contrast to traditional file transfer protocols, modern peer-to-peer protocols actually
7 work *better* when large numbers of users request data simultaneously because as the
8 number of users seeking a file grows, so too does the number of users from which to
9 download the file. Moreover, a distributed web of users is far more difficult to shut
10 down than a central server.

11 8. The most popular modern peer-to-peer file transfer protocol is the
12 BitTorrent protocol. Studies have estimated that the BitTorrent protocol accounts for
13 up to 70% of all peer-to-peer traffic and as much as 50% of all Internet traffic in some
14 parts of the world. Depending on the particular BitTorrent network involved, at any
15 one time any number of people, from one or two, to several thousands, unlawfully use
16 the BitTorrent network to upload and download copyrighted material. The premise of
17 BitTorrent sharing is well known, and is described in length on the Bittorent.com
18 website (last checked October 5, 2012):

19 <http://www.bittorrent.com/help/guides/beginners-guide>.

20 9. In BitTorrent vernacular, individual downloaders of a file are called
21 “peers.” The aggregate group of peers involved in downloading a particular file is
22 called a “swarm.” A server that stores a list of peers in a swarm is called a “tracker.”
23 A computer program that implements the BitTorrent protocol is called a “BitTorrent
24 client.” The person who possesses a complete digital reproduction of a given file and
25 intentionally elects to share the file with other Internet users is called the “seeder.”
26 That complete file is called a “seed.”

27 10. Normal commercial computers do not come pre-loaded with the
28 BitTorrent software. Each peer within a swarm must have separately installed on their

1 respective computers special software that allows peer-to-peer sharing of files by way
2 of the Internet. The seeder and peers in the swarm use software known as BitTorrent
3 clients. Among the most popular BitTorrent clients are Vuze (formerly Azureus),
4 µTorrent, Transmission and BitTorrent 7, although many others are used as well. In
5 any event, the seeder and each peer must intentionally install a BitTorrent client onto
6 his or her computer before that computer can be used to join a BitTorrent file sharing
7 network.

8 11. The sharing of a file via the BitTorrent protocol operates as follows.
9 First, the initial seeder creates a small “torrent” file that contains instructions for how
10 to find the seed. The seeder uploads the torrent file to one or more of the many
11 torrent-indexing sites. As Internet users come across the torrent file, they intentionally
12 elect to load the torrent files in their BitTorrent client, which uses the instructions
13 contained in the torrent file to locate the seed. These users now are peers in the swarm
14 with respect to that digital reproduction. The BitTorrent protocol dictates that each
15 peer download a random portion of the file (a “piece”) from the seed. After a peer has
16 downloaded its first piece, it then shares that piece and subsequent pieces with other
17 peers in the swarm. The effect of this protocol is that each peer is both copying and
18 distributing copyrighted material at the same time. That is, each peer in a BitTorrent
19 network has acted and acts in cooperation with other peers by agreeing to provide, and
20 actually providing, an infringing reproduction of at least a substantial portion of a
21 copyrighted work in anticipation of the other peers doing likewise. Joining a
22 BitTorrent network is an intentional act, requiring the selection by a peer of multiple
23 links to do so.

24 12. In BitTorrent networks, the infringement may continue even after the
25 original seeder has gone completely offline, because the peers that have joined the
26 swarm have become seeders themselves. Any BitTorrent client may be used to join a
27 swarm. The more peers that join the swarm, the faster the rate of data transfer
28 typically occurs because the odds of connecting to another peer improves. As time

1 goes on, the size of the swarm varies, yet it may endure for a long period, with some
2 swarms enduring for 6 months to well over a year depending on the popularity of the
3 copyrighted work. Since the entire swarm began with a single seed, the initial seeder
4 and peers have long lasting effects on the swarm. As a result, the original seed file
5 becomes unlawfully duplicated multiple times by multiple parties. With respect to
6 any particular swarm, the copied torrent file remains the same.

7 13. The BitTorrent protocol is particularly well suited to transferring large
8 files, such as the audiovisual works produced by Plaintiff, as it allows even small
9 computers with low bandwidth to be capable of participating in large data transfers
10 across a peer-to-peer network. Where, as here, a content owner such as Plaintiff has
11 not authorized this uncontrolled mass-reproduction and distribution of its content via
12 the BitTorrent protocol, I believe that the copying and distribution of its content
13 violates copyright laws. Because BitTorrent is a distributed protocol, there is no
14 central server that can be targeted for purposes of stemming the tide of piracy. I
15 believe that seeking recourse against individual content pirates is likely to be the most
16 effective means of addressing BitTorrent-based content piracy.

17 **Identification of the John Doe in Swarm**

18 14. The life cycle as it relates to monitoring of Plaintiff’s copyrighted Video
19 begins as follows. When a copyrighted work is requested to be monitored, my
20 colleagues and I first check to ensure that a copyright registration exists for the work
21 or is in process with the U.S. Copyright Office.

22 15. In this case, we confirmed that the work at issue in the above-captioned
23 case is titled “A Peek Behind the Scenes at a Show” with Copyright Registration
24 Number: PA0001802629.

25 16. Once the copyright information is confirmed, 6881 uses its sophisticated
26 and proprietary peer-to-peer network forensic software to perform exhaustive real
27 time monitoring of the BitTorrent-based swarm involved in distributing the
28 copyrighted file relevant to Plaintiff’s action. 6881’s proprietary software is effective

1 in capturing granular-level data about the activity of peers in the swarm and their
2 infringing conduct and 6881's processes are designed to ensure that information
3 gathered about all individual IP addresses in the swarm is accurate.

4 17. The digital files for which we search are available on peer-to-peer
5 networks. A person making a copy available on a peer-to-peer network typically had
6 obtained the copy from a peer-to-peer network. Whenever a digital file is located on
7 anyone's computer on a peer-to-peer network, that file is available to be downloaded
8 from that computer to a requestor's computer. In every case that Plaintiff's Video is
9 available on a peer-to-peer network, it is an unauthorized distribution of that work. In
10 this case, the peer-to-peer network on which we found unauthorized distribution of
11 Plaintiff's Video was a BitTorrent network.

12 18. The first step in the infringer-identification process is to locate a single
13 swarm where peers are distributing the Video. I accomplished this step by using a
14 variety of techniques to locate the torrent file sharing the name of copyrighted Video.
15 Such files are commonly located on torrent indexing sites, but can also be found on
16 Internet file-sharing forums and areas where users congregate. Because a torrent file
17 only contains directions about where to find the swarm associated with a particular
18 item of digital content, the next step is to locate that swarm.

19 19. The most common means of locating the swarm is to connect to a
20 BitTorrent tracker, which is a server that contains an updated list of peers in the
21 swarm. A typical torrent file contains a list of multiple trackers associated with the
22 underlying file. Other means of locating the swarm include using Distributed Hash
23 Tables, which allow each peer to serve as a "mini-tracker" and Peer Exchange, which
24 allows peers to share data about other peers in the swarm without the use of a tracker.
25 I used all three methods to locate the swarm associated with Plaintiff's copyrighted
26 Video.

1 20. After locating the swarm, I used 6881’s proprietary forensic software to
2 conduct an exhaustive real time “fingerprint” of individuals in the swarm. Through
3 this “fingerprint,” I can determine:

- 4 a. The time and date the infringer was found;
- 5 b. The time(s) and date(s) when a portion of the copyrighted file was
6 downloaded successfully to the infringer’s computer;
- 7 c. The time and date the infringer was last successfully connected to
8 BitTorrent network;
- 9 d. The Internet protocol (“IP”) address assigned to the infringer’s computer;
- 10 e. The BitTorrent software application used by the infringer;
- 11 f. The size of the copyrighted file;
- 12 g. The percent of the file downloaded by 6881’s software from the
13 infringer’s computer;
- 14 h. The percent of the copyrighted file on the infringer’s computer which is
15 available at that moment for copying by other peers; and
- 16 i. Any relevant transfer errors.

17 21. Although I was able to observe the infringing activities of John Doe
18 through this forensic software, this system does not allow me to access John Doe’s
19 computer to obtain identifying personal information. Nor does this software allow me
20 to upload a file onto John Doe’s computer or communicate with it in any way. Due to
21 the partially anonymous nature of the BitTorrent distribution systems used by John
22 Doe, the true name, street address, telephone number and email address of John Doe is
23 unknown to Plaintiff at this time. To the extent that persons using a peer-to-peer
24 network identify themselves, they use “user names” or “network names” which
25 typically are nicknames that do not disclose the true identity of the user, and do not
26 indicate the residence or business address of the user. 6881 software can only identify
27 the infringers by their IP address and the date and time they were detected in the
28

1 swarm. Note that while 6881 detects an infringement at a particular instant, the
2 infringer may, and likely is infringing at other times as well.

3 22. An IP address is a unique number that is assigned to Internet users by an
4 Internet service provider (“ISP”) at a given date and time. An ISP generally records
5 the time and dates that it assigns each IP address to a subscriber and maintains for a
6 period of time a record of such an assignment to a subscriber in logs maintained by the
7 ISP. In addition, the ISP maintains records which typically include the name, one or
8 more addresses, one or more telephone numbers, and one or more email addresses of
9 the subscriber. However, these records are not public and are not available to 6881 at
10 this time. BitTorrent technology relies on the ability to identify the computers to and
11 from which users can search and exchange files. The technology identifies those
12 computers by the IP address from which the computer connects to the Internet. Taking
13 advantage of this technology and unique data associated with the copyrighted file is
14 what allows 6881 to locate individuals pirating the Plaintiff’s copyrighted works.

15 23. There are two types of IP addresses: dynamic and static. A static IP
16 address is an IP address that will be associated with a particular user as long as that
17 user is a customer of a given Internet service provider. A dynamic IP address is an IP
18 address that will change from time-to-time. Most consumer customers of ISPs are
19 assigned a dynamic IP address. The reason for this is that an ISP can get by with a
20 smaller overall pool of IP addresses if it simply assigns the next available IP address
21 at a given time to a customer who wishes to connect to the Internet versus allocating a
22 permanent and unique IP address to each of its users. ISPs keep logs of IP addresses,
23 but the length of time they keep the logs can be as short as days.

24 24. If one knows a computer’s Internet Protocol address, one can, using
25 publicly available reverse-lookup databases on the Internet, identify the ISP used by
26 that computer, the city (or county) and state in which the computer was located, and
27 the date and time that the Internet Protocol address was obtained. Using this
28

1 information 6881 was able to determine that the ISP that provided the IP addresses
2 associated with John Doe is Verizon Online.

3 25. After recording granular level data about every peer in the swarm, the
4 next step is to carefully and thoroughly review the data produced by 6881's
5 proprietary forensic software to determine what peers were actually involved in
6 illegally reproducing and distributing Plaintiff's Video. When a verified peer was
7 located who made Plaintiff's copyrighted Video available for distribution and
8 reproduction via the BitTorrent protocol, I downloaded and retained both the torrent
9 files and the actual digital reproductions being offered for distribution to verify that
10 the digital copies being distributed in the swarm were in fact copies of the Plaintiff's
11 copyrighted Video. Because a file could be mislabeled, corrupt or otherwise not an
12 actual copy of Plaintiff's Video, I physically downloaded the file and compared it to
13 an actual copy of the Video to confirm that the file was a substantially-similar
14 reproduction of the copyrighted Video.

15 26. Finally, I stored all of the data we collected in a central database for later
16 use, examination and audit. 6881 uses these databases to record the name of the ISP
17 having control of the IP address and the state (and often the city or county) associated
18 with that IP address. 6881 has confirmed that the file obtained from the infringing
19 individual is a copy of the copyrighted Video.

20 27. In this case, I personally observed John Doe's IP address, listed in the
21 Complaint (ECF No. 1 ¶ 4), downloading and uploading the Video in a BitTorrent
22 swarm. Once obtaining a full version of the Video file, John Doe (then a "seeder")
23 shared pieces of that copyrighted Video file (i.e. "seed") with other individuals (i.e.
24 "peers").

25 **The Critical Importance of Expedited Discovery**

26 28. As explained above, John Doe is known to Plaintiffs only by the IP
27 number assigned by his ISP on the date and time we observed John Doe engaging in
28 infringing conduct. The only party from whom Plaintiff can discover John Doe's

1 actual name and physical address are his ISP: Verizon Online. Without expedited
2 discovery in this case against John Doe’s ISP, Plaintiff will have no means of serving
3 John Doe with the complaint and summons in this case, and no means of protecting its
4 creative content from ongoing infringement.

5 29. ISPs have different policies regarding the length of time they preserve
6 information about what IP address was associated with a given subscriber at a given
7 date and time. Some ISPs store this information for as little as months or even weeks
8 before potentially permanently erasing the data they contain—especially for dynamic
9 IP addresses. Informal requests for data preservation to ISPs can meet with varying
10 degrees of success and are no substitute for formal discovery. If an ISP does not have
11 to respond efficiently to a discovery request, the information in that ISP’s database
12 may be erased forever. This makes expedited discovery of the identity associated with
13 the IP address critically important in the instant action.

14 30. Certain ISPs own excess IP addresses that they lease or otherwise
15 allocate to third party “intermediary ISPs.” Because the lessor ISP has no contractual
16 relationship with the intermediary ISP’s customers, the leasing ISP would be unable to
17 identify John Doe through reference to their user logs. In contrast, the intermediary
18 ISP, lessee ISP, should be able to so identify.

19 31. The copyrighted file at the heart of this action continues to be made
20 available for unlawful duplication and distribution via the BitTorrent protocol, in
21 violation of Plaintiff’s exclusive rights to reproduce and distribute the copyrighted file
22 via the BitTorrent protocol. 6881 continues to monitor on a real time basis the
23 unlawful duplication and distribution and to identify content pirate by the unique IP
24 address assigned to them by their respective ISPs on the date and at the time of the
25 infringing activity.

26 32. I am informed that before any discovery can be made in civil litigation, a
27 meeting of the parties or the parties counsel must be held. However, the actual
28 identity of the John Doe is unknown to Plaintiff, and therefore the Complaint cannot

1 be served on him or her. Without serving the Complaint on a defendant, the pre-
2 discovery meeting cannot be held. Therefore, Plaintiff needs early discovery from the
3 ISPs, so that the name and address of the accused infringer can be obtained by
4 Plaintiff to enable it to enforce its rights in its copyright and prevent continued
5 infringement.

6 33. I declare under penalty of perjury that the forgoing is true and correct of
7 my own personal knowledge, except for those matters stated as information and belief,
8 and those matters I believe to be true, and if called upon to testify I can competently
9 do so as set forth above.

10
11 Executed on October 5, 2012, in Minneapolis, MN.

12
13 
14

15 _____
16 Peter Hansmeier