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

| | |
|---|---|
| TWO-WAY MEDIA LTD<br>*Plaintiff,*<br>v.<br>COMCAST CABLE COMMUNICATIONS, LLC, COMCAST INTERACTIVE MEDIA, LLC, NBCUNIVERSAL MEDIA, LLC, and NBCUNIVERSAL, LLC<br>*Defendants.* | C.A. No.<br><br>JURY TRIAL DEMANDED |

## COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff Two-Way Media Ltd ("TWM") by its undersigned attorneys, for its complaint against Defendants Comcast Cable Communications, LLC, Comcast Interactive Media, LLC, NBCUniversal Media, LLC, and NBCUniversal, LLC, hereby alleges the following:

## PARTIES

1. Plaintiff TWM is a limited partnership existing under the laws of Colorado with its principal place of business at 2042 Alpine Drive, Boulder, Colorado 80304, and with its general partner existing under the laws of Delaware.

2. Plaintiff TWM is informed and believes, and on that basis alleges, that Defendant Comcast Cable Communications, LLC is a limited liability company existing under the laws of Delaware with its principal place of business at 1701 JFK Boulevard, Philadelphia, Pennsylvania 19103. Comcast Interactive Media, LLC is a limited liability company existing under the laws of Delaware with its principal place of business at 1701 JFK Boulevard, Philadelphia, Pennsylvania 19103. Comcast Cable Communications, LLC and Comcast Interactive Media, LLC (collectively referred to as "Comcast") are wholly owned indirect and direct subsidiaries respectively of Comcast Corporation, and together form one of the two operating units of Comcast Corporation. Both Comcast Cable Communications, LLC and Comcast Interactive Media, LLC are registered to do

business in Delaware and can be served with process through their registered agent Comcast Capital Corporation at 1201 N. Market Street, Suite 1000, Wilmington, Delaware 19801.

3. Plaintiff TWM is informed and believes, and on that basis alleges, that Defendant NBCUniversal Media, LLC is a limited liability company existing under the laws of Delaware with its principal place of business at 30 Rockefeller Plaza, New York, New York 10112-0015. The sole member and sole owner of NBCUniversal Media, LLC is NBCUniversal, LLC, a limited liability company organized under the laws of the state of Delaware with its principal place of business at 30 Rockefeller Plaza, New York, New York 10112-0015. NBCUniversal Media, LLC and NBCUniversal, LLC (collectively referred to as "NBCU") are wholly owned indirect subsidiaries of Comcast Corporation, and together form the other operating unit of Comcast Corporation. NBCUniversal Media, LLC is registered to do business in Delaware and can be served with process through its registered agent The Corporation Trust Company at Corporation Trust Center, 1209 Orange Street, Wilmington, Delaware 19801. NBCUniversal, LLC is registered to do business in Delaware and can be served with process through its registered agent Comcast Capital Corporation at 1201 N Market Street, Suite 1000, Wilmington, Delaware 19801.

## JURISDICTION AND VENUE

4. This Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a) because this action arises under the patent laws of the United States, 35 U.S.C. §§ 101 *et seq.*

5. This Court has personal jurisdiction over Comcast and NBCU as Defendants are residents of Delaware. Moreover, the Defendants have established minimum contacts with this forum such that the exercise of jurisdiction over Defendants would not offend traditional notions of fair play and substantial justice. Upon information and belief, Defendants derive substantial revenue from the sale of products and services, including those accused of infringement, that are placed into the stream of commerce for sale within this district. Defendants expect or are in a position reasonably to expect their actions to have consequences within this district. Defendants continuously do business, solicit business, engage in other persistent acts of conduct, and derive

substantial revenue from services provided to individuals in this district. This Court also has personal jurisdiction over Defendants because they regularly transact business in this judicial district, have committed and continue to commit acts of patent infringement in this district, and have availed themselves of Delaware's corporate laws. Defendants operate websites and other digital assets for the purpose of promoting products and services alleged to infringe TWM's patents. Websites and other digital assets owned and maintained by Defendants can be accessed by users and potential users located in this District. Venue is proper in this federal district pursuant to 28 U.S.C. §§ 1391(a)–(c) and 1400(b) because Comcast and NBCU reside in this District, have done and continue to do business in this District, and have committed and continue to commit acts of infringement in this District, entitling TWM to relief.

## ASSERTED PATENTS

6. On August 13, 2002, United States Patent No. 6,434,622 ("the '622 patent") was duly and legally issued for an invention entitled "Multicasting Method and Apparatus." Reexamination Certificates for the '622 patent issued on September 12, 2006 and December 2, 2008. A true and correct copy of the '622 patent is attached as Exhibit 1.

7. On September 4, 2007, United States Patent No. 7,266,686 ("the '686 patent") was duly and legally issued for an invention entitled "Multicasting Method and Apparatus." A true and correct copy of the '686 patent is attached as Exhibit 2.

8. On September 17, 2013, United States Patent No. 8,539,237 ("the '237 patent") was duly and legally issued for an invention entitled "Methods and Systems for Playing Media." A true and correct copy of the '237 patent is attached as Exhibit 3.

9. The '622 patent, the '686 patent, and the '237 patent issued from a series of applications claiming priority to May 9, 1996.

10. TWM was assigned the '622 patent, the '686 patent, and the '237 patent, and continues to hold all rights and interest in all three patents (the "TWM Patents").

11. Comcast and NBCU (collectively, the "Defendants") make, use, sell, market, provide, and support products and services for live streaming media, that, for example, infringe the '622 patent and the '237 patent.

12. Comcast also makes, uses, sells, markets, provides, and supports products and services for live streaming media, that, for example, infringe the '686 patent.

13. To redress Comcast's and NBCU's infringement of the '622 patent, the '686 patent, and the '237 patent, TWM seeks actual damages and a permanent injunction to enjoin all infringement by Comcast and NBCU. Absent a permanent injunction, TWM faces real, substantial, and irreparable damage and injury of a continuing nature from Defendants' infringement, for which TWM has no adequate remedy at law.

## FACTUAL BACKGROUND

### The Recent Rise of TV Everywhere Services

14. The delivery of television programming has changed dramatically in the last five years. In particular, it has expanded to include distributing TV programming through devices other than televisions. In 2008, a study estimated that nearly 1 million U.S. households relied entirely on the Internet for television viewing. By 2010, U.S. cable multi-system operators ("MSOs") started to see quarterly subscriber declines as former subscribers, known as "cord cutters," relied upon Internet streaming services (such as YouTube, Hulu and Netflix) for their video programming.

15. In response, the MSOs and other multichannel video programming distributors ("MVPDs") in 2009 began offering "TV Everywhere" services to their subscribers. TV Everywhere systems allow subscribers to stream content (both video on demand and live TV) to digital platforms (such as personal computers, tablets and smartphones) via the Internet.

16. By 2010, given the rising popularity of receiving TV programming through these digital platforms, many MVPDs and television programmers (e.g., NBCU, HBO, ESPN) had rolled out TV Everywhere services to their subscribers.

17. A survey of U.S. pay TV households published in the first quarter of 2014 indicates that 21% of U.S. pay TV households now access TV Everywhere content across devices and web browsers, and TV Everywhere video consumption grew 246% year-over-year.

**Two-Way Media and the Patents-in-Suit**

18. TWM's predecessor in interest, Netcast Communications Corp. ("Netcast"), was a pioneer of technology used for streaming of live (also known as linear or real-time) audio and video over the Internet. Live streaming allows users to receive audio and/or video information over the Internet at approximately the same time as that information is being transmitted, and without having to wait for the entire information to download. In 1995, Netcast founder and TWM managing partner James Butterworth, along with Netcast chief technical officer Antonio Monteiro, invented an interactive distributed client-server architecture that allows live audio and/or video streams to be sent to a large number of users in a reliable and efficient manner, while enabling commercial recordkeeping and marketing functions such as gathering usage statistics, dynamically inserting advertising content into streams, and offering targeted product sales, such as buying music or concert tickets that relate to a song that a user is listening to.

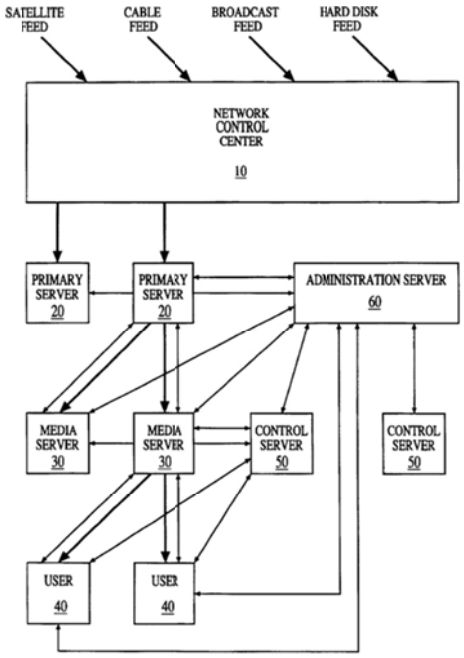
19. TWM owns many patents on audio and visual streaming technology based on the Netcast system. All of these patents claim priority to an original application filed May 9, 1996, entitled "Multicasting Method and Apparatus." In addition to other TWM patents, continuations of the original application issued as the '622 patent on August 13, 2002, the '686 patent on September 4, 2007, and the '237 patent on September 17, 2013.

20. In 2002, Netcast conveyed the '622 patent and all continuations (including the '686 and '237 patents) to Netcast Innovations Ltd., which later that year changed its name to Two-Way Media LLC. In 2011, Two-Way Media LLC converted to a limited partnership and changed its name to Two-Way Media Ltd.

21. The shared specification in the TWM Patents describes a system for transmitting, receiving, and monitoring audio and video streams over the Internet. Before a user can receive

audio or video over the Internet, analog transmission signals of audio or video must first be converted to digital signals. This is because computers can process only data or signals that are digital (i.e., data that have been converted to a format consisting of zeroes and ones). In the TWM system, incoming analog and digital audio and/or video signals are received by a central facility, which converts the analog signals to digital signals that computers can understand. This central facility then sends or forwards digitized audio and/or video signals to various computers, or servers, which then transmit the signals to users across the Internet or similar communications networks. The transmissions are monitored to ensure the reliability and accuracy of gathered usage statistics. The servers may also play a role in ensuring that each user receives the particular stream of the user's choosing and that the user receives the signals at substantially the same time that the signals are transmitted from the central facility.

22. The streams sent from the central facility may pass through selected intermediate computers/servers on their route to the user. The intermediate computers/servers direct the stream received from the central facility to the users who have requested that stream. An example of an embodiment of the TWM system from Figure 1 of the TWM Patents is shown below. As can be seen, the Media Servers 30 direct the content stream received from the Primary Servers 20 to the Users 40. The precise number and location of the intermediate servers can vary based on a variety of factors, such as population, number of subscribers, and level of network congestion. Among other benefits, using intermediate servers introduces scalability into the network, allowing the network to service greater numbers of users as demand increases.




23. In an example embodiment, while the user is receiving the selected content, one or more of the servers may monitor a user's reception of the selected stream and capture certain usage information. The information captured may indicate, for example, the identity (or a proxy for the identity) of the user, the identity of the specific stream that the user requested, how long the user received that stream, the times at which the user received the stream, and the content of the stream. Additionally, server computers, whether at the central facility or at intermediate servers, may insert advertising or programming targeted to users into the streams that are sent to users. The content of the advertising and programming may be varied based on the identity of the user such that the advertising or programming may be targeted to different demographics or geography.

**Comcast and NBCU's TV Everywhere Offerings**

24. Comcast and NBCU offer TV Everywhere services that live stream content via the Internet. For example, subscribers to Comcast's cable service (*e.g.*, XFINITY) can live stream content through Comcast's TV Everywhere service (sometimes called TV Go). Likewise, a user can live stream channels offered by NBCU using its TV Everywhere services. These live streams through TV Everywhere services can be viewed on workstations and laptops (using standard Web browsers on popular operating systems like Windows, OS X and Linux), and on tablets,

smartphones and other devices that use the Apple iOS mobile operating system *(e.g.,* on the iPhone, iPad, and other Apple devices) and the Android mobile operating system *(e.g.,* on all Android-based smartphones and tablets). These tablet, smartphone and other devices run applications (or "apps") that enable the live streaming.

25. On information and belief, the servers used by Comcast and NBCU for streaming media generate detailed records and usage statistics about the TV Everywhere services.

26. Comcast and NBCU also contract with several third parties, such as Adobe Systems Incorporated and comScore, Inc., to gather usage statistics related to the TV Everywhere services. These usage statistics are based, in part, on messages generated by software running on the user devices and transmitted to the third parties.

27. Comcast currently makes available for live streaming at least the following programming streams: BBC World News; beIN Sports and beIN ñ Sports; Disney (including the Disney Channel, Disney Junior, Disney XD, FX, and FXX); ESPN (including ESPN, ESPN 2, ESPN 3, ESPNews, ESPN Deportes, and ESPN U); Fox (including Fox News, Fox Business, Fox Sports 1, and the Big Ten Network); Nat Geo (including the National Geographic Channel, Nat Geo Wild, and Nat Geo Wild Portuguese); NBC Sports Live Extra, NBC Sports Talk Radio, Universal Sports, NBC Olympics, NHL Network, NBCUniversal (including CNBC, MSNBC, the Golf Channel, Esquire TV, E!, Sprout, USA Network, Syfy, Oxygen, Bravo, mun2, and Deportes Telemundo en Vivo); A&E Networks (A&E, History Channel, ); Scripps (HGTV, Food Network, Cooking Channel, Travel Channel, and DIY Network); Pac-12 Networks (including national, Arizona, Bay Area, Los Angeles, Mountain, Oregon, and Washington); Turner Broadcasting (including CNN, HLN, and truTV); Starz; and Willow TV.

28. NBCU currently makes available for live streaming at least the following programming streams: CNBC, MSNBC, NBC Sports, NBC Sports Radio, NBC Olympics, NBC Sports Tour de France Live, the Golf Channel, Universal Sports Network, Esquire TV, E!, Sprout, USA Network, Syfy, Oxygen, Bravo, and Deportes Telemundo en Vivo.

**INFRINGEMENT OF U.S. PATENT NO. 6,434,622**

29. TWM incorporates and re-alleges paragraphs 1 through 28 as if fully set forth herein.

30. Defendants have been and still are infringing one or more claims of the '622 patent, literally or under the doctrine of equivalents, by, for example, live streaming one or more of the channels identified in paragraphs 27-28 above through apps run on one or more of the platforms and devices identified in paragraph 24 above. Defendants also have been and still are jointly infringing one or more claims of the '622 patent by, for example, contracting out for services related to the gathering of usage statistics and recordkeeping to third parties. This constitutes direct infringement under 35 U.S.C. § 271(a) because Defendants are making, using, offering for sale and selling, or controlling and directing the making, using, offering for sale and selling of, the methods and systems claimed in the '622 patent.

31. As a direct and proximate result of Defendants' acts of infringement, TWM has been, is being, and will be damaged. Defendants' continued infringement of TWM's exclusive rights under the '622 patent will continue to damage TWM, causing irreparable harm for which there is no adequate remedy at law, unless enjoined by this Court.

32. TWM also is entitled to recover from TWM the damages sustained by TWM as a result of Defendants' wrongful acts in an amount subject to proof at trial.

33. TWM intends to seek discovery on the issue of willfulness and reserves the right to seek a willfulness finding relative to pre-suit infringement and/or post-suit infringement of the '622 patent.

34. At least as early as its receipt of this Complaint, Defendants have had knowledge of the '622 patent and written notice of its infringement.

**INFRINGEMENT OF U.S. PATENT NO. 7,266,686**

35. TWM incorporates and re-alleges paragraphs 1 through 34 as if fully set forth herein.

36. Comcast has been and still is infringing one or more claims of the '686 patent, literally or under the doctrine of equivalents, by, for example, live streaming one or more of the channels identified in paragraph 27 above through apps run on one or more of the platforms and

devices identified in paragraph 24 above. Comcast also has been and still is jointly infringing one or more claims of the '686 patent by, for example, contracting out for services related to the gathering of usage statistics and recordkeeping to third parties. This constitutes direct infringement under 35 U.S.C. § 271(a) because Comcast is making, using, offering for sale and selling, or controlling and directing the making, using, offering for sale and selling of, the methods and systems claimed in the '686 patent.

37. As a direct and proximate result of Comcast's acts of infringement, TWM has been, is being, and will be damaged. Comcast's continued infringement of TWM's exclusive rights under the '686 patent will continue to damage TWM, causing irreparable harm for which there is no adequate remedy at law, unless enjoined by this Court.

38. TWM also is entitled to recover from TWM the damages sustained by TWM as a result of Comcast's wrongful acts in an amount subject to proof at trial.

39. TWM intends to seek discovery on the issue of willfulness and reserves the right to seek a willfulness finding relative to pre-suit infringement and/or post-suit infringement of the '686 patent.

40. At least as early as its receipt of this Complaint, Comcast has had knowledge of the '686 patent and written notice of its infringement.

**INFRINGEMENT OF U.S. PATENT NO. 8,539,237**

41. TWM incorporates and re-alleges paragraphs 1 through 40 as if fully set forth herein.

42. Defendants have been and still are infringing one or more claims of the '237 patent, literally or under the doctrine of equivalents, by, for example, live streaming one or more of the channels identified in paragraphs 27-28 above through apps run on one or more of the platforms and devices identified in paragraph 24 above. This constitutes direct infringement under 35 U.S.C. § 271(a) because Defendants are making, using, offering for sale and selling the methods and systems claimed in the '237 patent.

43. As a direct and proximate result of Defendants' acts of infringement, TWM has been, is being, and will be damaged. Defendants' continued infringement of TWM's exclusive rights under the '237 patent will continue to damage TWM, causing irreparable harm for which there is no adequate remedy at law, unless enjoined by this Court.

44. TWM also is entitled to recover from TWM the damages sustained by TWM as a result of Defendants' wrongful acts in an amount subject to proof at trial.

45. TWM intends to seek discovery on the issue of willfulness and reserves the right to seek a willfulness finding relative to pre-suit infringement and/or post-suit infringement of the '237 patent.

46. At least as early as its receipt of this Complaint, Defendants have had knowledge of the '237 patent and written notice of its infringement.

## PRAYER FOR RELIEF

TWM respectfully requests entry of judgment in its favor and against Comcast and NBCU as follows:

(a) Declaring that Comcast has infringed and continues to infringe the '622 patent, the '686 patent, and the '237 patent;

(b) Declaring that NBCU has infringed and continues to infringe the '622 patent and the '237 patent;

(c) Declaring that the asserted patents are valid and enforceable;

(d) Awarding damages arising out of Comcast's infringement of the '622 patent, the '686 patent, and the '237 patent, together with prejudgment and post-judgment interest, costs, and disbursements, in an amount according to proof;

(e) Awarding damages arising out of NBCU's infringement of the '622 patent and the '237 patent, together with prejudgment and post-judgment interest, costs, and disbursements, in an amount according to proof;

(f) Awarding enhanced damages pursuant to 35 U.S.C. § 284;

(g) Permanently enjoining Comcast and its officers, agents, employees, and those acting in privity with them, from further infringement of the '622 patent, the '686 patent, and the '237 patent;

(h) Permanently enjoining NBCU and its officers, agents, employees, and those acting in privity with them, from further infringement of the '622 patent and the '237 patent;

(i) Requiring Defendants to file with this Court, within thirty (30) days after the entry of final judgment, a written statement under oath setting forth in detail the manner in which they have complied with the injunctions;

(j) Requiring Defendants to file with this Court an accounting for infringing acts not presented at trial and an award by the Court of additional damages for such acts;

(k) A judgment and order finding that this is an exceptional case within the meaning of 35 U.S.C. § 285 and awarding to TWM its reasonable attorneys' fees; and

(l) Such other and further relief in law or in equity to which TWM may be justly entitled.

**DEMAND FOR JURY TRIAL**

TWM respectfully requests a trial by jury on all issues so triable.

Dated: August 1, 2014

Respectfully submitted,

FARNAN LLP

*/s/Brian E. Farnan*
Joseph J. Farnan, III (Bar No. 3945)
Brian E. Farnan (Bar No. 4089)
Michael J. Farnan (Bar No. 5165)
919 N. Market Street, 12th Floor
Wilmington, DE 19801
Telephone: (302) 777-0300
Facsimile: (302) 777-0301
jjfarnan@farnanlaw.com
bfarnan@farnanlaw.com
mfarnan@farnanlaw.com

**OF COUNSEL**

Parker C. Folse III
Brooke A.M. Taylor
Rachel S. Black
SUSMAN GODFREY L.L.P.
1201 Third Avenue, Suite 3800
Seattle, WA 98101-3000
Telephone: (206) 516-3880
Facsimile: (206) 516-3883
pfolse@susmangodfrey.com
btaylor@susmangodfrey.com
rblack@susmangodfrey.com

Michael F. Heim
Leslie V. Payne
Micah J. Howe

R. Allan Bullwinkel
HEIM, PAYNE & CHORUSH L.L.P.
600 Travis Street, Suite 6710
Houston, TX 77002-2912
Telephone: (713) 221-2000
Facsimile: (713) 221-2021
mheim@hpcllp.com
lpayne@hpcllp.com
mhowe@hpcllp.com
abullwinkel@hpcllp.com

*Attorneys for Plaintiff Two-Way Media Ltd*