

EXHIBIT 0
REFERENCES DEMONSTRATING THE OBVIOUSNESS OF U.S. PATENT NO. 10,771,849

As a general matter, all portions of each prior art item are relied upon to support the disclosure of each patent claim limitation, as all portions provide general support. Supporting citations are nevertheless provided, but do not necessarily represent every location where a particular claim term may be found in the prior art item. Any reference to a figure in cited text incorporates by reference that figure itself, and any citation to a figure incorporates by reference any description of that figure in a reference. Identified in the claim chart below (and in the claim charts referenced therein) are exemplary portions of the references based on presently available information and Plaintiff’s current allegations. The references, however, may contain additional support for particular claim limitations. Defendants expressly reserve the right to rely on additional or different portions of the prior art items other than those specifically cited in these claim charts and/or below, other documents subject to discovery, and their expert reports to provide context and/or to aid in understanding the cited portions of the references. Defendants additionally reserve the right to supplement and/or amend this chart and those referenced in it.

’849 Patent Limitations	Exemplary Evidence of Anticipation and/or Obviousness
[1.pre] A method comprising:	To the extent the preamble language is limiting, the references below disclose or render obvious a “method” for performing the recited limitations. <i>See, e.g.</i>:¹ <i>See</i> citations corresponding to [1.pre] in claim charts for: Carmel, Dankworth, Dror, Gentric, Hui, Major ’772², Mattavelli, QuickTime, Ramkishor, RealNetworks System, Stockhammer, Van Der Meer, Willebeek-LeMair, Windows Media 9 System.
[1.a.i.] receiving audio and video segments encoded in a digital encoding format and with an encoding rate;	The references below disclose or render obvious “receiving audio and video segments encoded in a digital encoding format and with an encoding rate.” <i>See, e.g.</i>: <i>See</i> citations corresponding to [1.a.i.] in claim charts for: Carmel, Dankworth, Dror, Gentric, Hui, Major ’772, QuickTime, Ramkishor, RealNetworks System, Stockhammer, Van Der Meer, Wang, Willebeek-LeMair, Windows Media 9 System.
[1.a.ii.] wherein, said audio and video segments are associated with object parameters and supplied host path identification to form multimedia objects;	The references below disclose or render obvious “wherein, said audio and video segments are associated with object parameters and supplied host path identification to form multimedia objects.” <i>See, e.g.</i>: <i>See</i> citations corresponding to [1.a.ii.] in claim charts for: Carmel, Dankworth, Dror, Gentric, Hui, Major ’772, Mattavelli, QuickTime, RealNetworks System, Stockhammer, Van Der Meer, Willebeek-LeMair, Windows Media 9 System.

¹ The names of the references cited herein refer to the abbreviated names listed in Appendix A of Defendants’ Invalidity Contentions to which this chart is attached.

² Any references to Major ’772 also includes Major ’831, to which Major ’772 claims priority and which is incorporated by reference into Major ’772.

EXHIBIT 0
REFERENCES DEMONSTRATING THE OBVIOUSNESS OF U.S. PATENT NO. 10,771,849

'849 Patent Limitations	Exemplary Evidence of Anticipation and/or Obviousness
[1.b.i.] requesting by a multimedia player, transmission of said multimedia objects;	The references below disclose or render obvious “requesting by a multimedia player, transmission of said multimedia objects.” <i>See, e.g.:</i> <i>See</i> citations corresponding to [1.b.i.] in claim charts for: Carmel, Dankworth, Dror, Gentric, Hui, Major '772, QuickTime, RealNetworks System, Stockhammer, Willebeek-LeMair, Windows Media 9 System.
[1.b.ii.] wherein said multimedia objects are located using http and received by said multimedia player from servers using a wireless connection;	The references below disclose or render obvious “wherein said multimedia objects are located using http and received by said multimedia player from servers using a wireless connection.” <i>See, e.g.:</i> <i>See</i> citations corresponding to [1.b.ii.] in claim charts for: Carmel, Dankworth, Dror, Gentric, Guo, Hui, Major '772, QuickTime, Ramkishor, RealNetworks System, Stockhammer, Van Der Meer, Wang, Willebeek-LeMair, Windows Media 9 System.
[1.c.i.] playing back received multimedia objects by the multimedia player,	The references below disclose or render obvious “playing back received multimedia objects by the multimedia player.” <i>See, e.g.:</i> <i>See</i> citations corresponding to [1.c.i.] in claim charts for: Carmel, Dankworth, Dror, Gentric, Hui, Major '772, QuickTime, RealNetworks System, Stockhammer, Van Der Meer, Willebeek-LeMair, Windows Media 9 System.
[1.c.ii.] wherein the multimedia player is configured to play multimedia objects in a sequence such that fluidity, video quality and audio quality are maintained by selecting a plurality of said multimedia objects that reflect available network bandwidth,	The references below disclose or render obvious “wherein the multimedia player is configured to play multimedia objects in a sequence such that fluidity, video quality and audio quality are maintained by selecting a plurality of said multimedia objects that reflect available network bandwidth.” <i>See, e.g.:</i> <i>See</i> citations corresponding to [1.c.ii.] in claim charts for: Carmel, Dankworth, Gentric, Hui, Major '772, Mattavelli, QuickTime, RealNetworks System, Stockhammer, Van Der Meer, Willebeek-LeMair, Windows Media 9 System.

EXHIBIT 0
REFERENCES DEMONSTRATING THE OBVIOUSNESS OF U.S. PATENT NO. 10,771,849

'849 Patent Limitations	Exemplary Evidence of Anticipation and/or Obviousness
[1.c.iii.] autonomously adjusting said selection and playback according to the multimedia object parameters and supplied host path identification, and by	The references below disclose or render obvious “autonomously adjusting said selection and playback according to the multimedia object parameters and supplied host path identification.” <i>See, e.g.:</i> <i>See</i> citations corresponding to [1.c.iii.] in claim charts for: Carmel, Dankworth, Dror, Gentric, Hui, Major '772, Mattavelli, QuickTime, RealNetworks System, Stockhammer, Van Der Meer, Willebeek-LeMair, Windows Media 9 System.
[1.c.iv.] utilizing optimized decoding processes to maintain quality playback.	The references below disclose or render obvious “utilizing optimized decoding processes to maintain quality playback.” <i>See, e.g.:</i> <i>See</i> citations corresponding to [1.c.iv.] in claim charts for: Carmel, Dankworth, Dror, Gentric, Hui, Major '772, Mattavelli, QuickTime, Ramkishor, RealNetworks System, Stockhammer, Van Der Meer, Wang, Willebeek-LeMair, Windows Media 9 System, Wolters.
[2] The method of claim 1, wherein the transmission of the multimedia objects is carried out by protocols that can serve files in a directory.	The references below disclose or render obvious “wherein the transmission of the multimedia objects is carried out by protocols that can serve files in a directory.” <i>See, e.g.:</i> <i>See</i> citations corresponding to [2] in claim charts for: Carmel, Dankworth, Dror, Gentric, Hui, Major '772, QuickTime, RealNetworks System, Stockhammer, Van Der Meer, Willebeek-LeMair, Windows Media 9 System.
[3] The method of claim 1, wherein the multimedia objects are created from a live multimedia stream that is transcoded into an optimal digital format at an optimal encoding rate reflecting available network bandwidth and converting the input multimedia stream into audio and video segments by splitting	The references below disclose or render obvious “wherein the multimedia objects are created from a live multimedia stream that is transcoded into an optimal digital format at an optimal encoding rate reflecting available network bandwidth and converting the input multimedia stream into audio and video segments by splitting the encoded stream into intervals for access by wireless clients.” <i>See, e.g.:</i> <i>See</i> citations corresponding to [3] in claim charts for: Carmel, Dankworth, Dror, Gentric, Hui, Major '772, QuickTime, RealNetworks System, Stockhammer, Van Der Meer, Wang, Willebeek-LeMair, Windows Media 9 System, Yu.

EXHIBIT 0
REFERENCES DEMONSTRATING THE OBVIOUSNESS OF U.S. PATENT NO. 10,771,849

'849 Patent Limitations	Exemplary Evidence of Anticipation and/or Obviousness
the encoded stream into intervals for access by wireless clients.	
[4] The method of claim 1, wherein a multimedia file is scanned for an I-frame, and a multimedia segment is split at the I-frame to create the video segment, together with a separate audio segment.	The references below disclose or render obvious “wherein a multimedia file is scanned for an I-frame.” See, e.g.: <i>See</i> citations corresponding to [4] in claim charts for: Carmel, Dankworth, Dror, Forecast, Gentric, Hui, Mattavelli, QuickTime, RealNetworks System, Stockhammer, Van Der Meer, Wang, Willebeek-LeMair, Windows Media 9 System.
[6.pre] A multimedia player comprising:	To the extent the preamble language is limiting, the references below disclose or render obvious a “multimedia player” for performing the recited limitations. <i>See, e.g.:</i> <i>See</i> citations corresponding to [6.pre] in claim charts for: Carmel, Dankworth, Dror, Gentric, Hui, Major '772, Mattavelli, QuickTime, Ramkishor, RealNetworks System, Stockhammer, Willebeek-LeMair, Windows Media 9 System.
[6.d.] computer executable instructions stored on a non-transitory computer readable medium which when executed by a processor:	The references below disclose or render obvious “computer executable instructions stored on a non-transitory computer readable medium which when executed by a processor.” <i>See, e.g.:</i> <i>See</i> citations corresponding to [6.d.] in claim charts for: Carmel, Dankworth, Dror, Gentric, Hui, Major '772, Mattavelli, QuickTime, Ramkishor, RealNetworks System, Van Der Meer, Willebeek-LeMair, Windows Media 9 System.
[6.b.i.] requests transmission of multimedia objects;	The references below disclose or render obvious “requests transmission of multimedia objects.” <i>See, e.g.:</i> <i>See</i> citations corresponding to [6.b.i.] in claim charts for: Carmel, Dankworth, Dror, Gentric, Hui, Major '772, Mattavelli, QuickTime, RealNetworks System, Stockhammer, Van Der Meer, Willebeek-LeMair, Windows Media 9 System.

EXHIBIT 0
REFERENCES DEMONSTRATING THE OBVIOUSNESS OF U.S. PATENT NO. 10,771,849

'849 Patent Limitations	Exemplary Evidence of Anticipation and/or Obviousness
[6.a.i.] receives audio and video segments encoded in a digital encoding format and with an encoding rate;	The references below disclose or render obvious “receives audio and video segments encoded in a digital encoding format and with an encoding rate.” <i>See, e.g.:</i> <i>See</i> citations corresponding to [6.a.i.] in claim charts for: Carmel, Dankworth, Dror, Gentric, Hui, Major '772, Mattavelli, QuickTime, RealNetworks System, Stockhammer, Van Der Meer, Wang, Willebeek-LeMair, Windows Media 9 System.
[6.a.ii.] wherein, said audio and video segments are associated object parameters and supplied host and path identification to form multimedia objects;	The references below disclose or render obvious “wherein, said audio and video segments are associated object parameters and supplied host and path identification to form multimedia objects.” <i>See, e.g.:</i> <i>See</i> citations corresponding to [6.a.ii.] in claim charts for: Carmel, Dankworth, Dror, Gentric, Hui, Major '772, Mattavelli, QuickTime, RealNetworks System, Stockhammer, Van Der Meer, Willebeek-LeMair, Windows Media 9 System.
[6.b.ii.] and wherein said multimedia objects are located using http and received by said multimedia player from servers using a wireless connection;	The references below disclose or render obvious “wherein said multimedia objects are located using http and received by said multimedia player from servers using a wireless connection.” <i>See, e.g.:</i> <i>See</i> citations corresponding to [6.b.ii.] in claim charts for: Carmel, Dankworth, Dror, Gentric, Guo, Hui, Major '772, Mattavelli, QuickTime, Ramkishor, RealNetworks System, Stockhammer, Van Der Meer, Wang, Willebeek-LeMair, Windows Media 9 System.
[6.c.i.] plays back received multimedia objects	The references below disclose or render obvious “plays back received multimedia objects.” <i>See, e.g.:</i> <i>See</i> citations corresponding to [6.c.i.] in claim charts for: Carmel, Dankworth, Dror, Gentric, Hui, Major '772, Mattavelli, QuickTime, RealNetworks System, Stockhammer, Van Der Meer, Willebeek-LeMair, Windows Media 9 System.
[6.c.ii.] in a sequence such that fluidity, video quality and audio quality are maintained by selecting a plurality of said	The references below disclose or render obvious “in a sequence such that fluidity, video quality and audio quality are maintained by selecting a plurality of said multimedia objects that reflect available network bandwidth.” <i>See, e.g.:</i>

EXHIBIT 0
REFERENCES DEMONSTRATING THE OBVIOUSNESS OF U.S. PATENT NO. 10,771,849

'849 Patent Limitations	Exemplary Evidence of Anticipation and/or Obviousness
multimedia objects that reflect available network bandwidth,	<i>See</i> citations corresponding to [6.c.ii.] in claim charts for: Carmel, Dankworth, Dror, Gentric, Hui, Major '772, Mattavelli, QuickTime, RealNetworks System, Stockhammer, Van Der Meer, Willebeek-LeMair, Windows Media 9 System.
[6.c.iii.] autonomously adjusting said selection and playback according to the multimedia object parameters and supplied host path identification,	The references below disclose or render obvious “autonomously adjusting said selection and playback according to the multimedia object parameters and supplied host path identification.” <i>See, e.g.:</i> <i>See</i> citations corresponding to [6.c.iii.] in claim charts for: Carmel, Dankworth, Dror, Gentric, Hui, Major '772, Mattavelli, QuickTime, RealNetworks System, Stockhammer, Van Der Meer, Willebeek-LeMair, Windows Media 9 System.
[6.c.iv.] and by utilizing optimized decoding processes to maintain quality playback.	The references below disclose or render obvious “utilizing optimized decoding processes to maintain quality playback.” <i>See, e.g.:</i> <i>See</i> citations corresponding to [6.c.iv.] in claim charts for: Carmel, Dankworth, Dror, Gentric, Hui, Major '772, Mattavelli, QuickTime, Ramkishor, RealNetworks System, Stockhammer, Van Der Meer, Wang, Willebeek-LeMair, Windows Media 9 System, Wolters.
[7.pre] A system comprising:	To the extent the preamble language is limiting, the references below disclose or render obvious a “system” for performing the recited limitations. <i>See, e.g.:</i> <i>See</i> citations corresponding to [7.pre] in claim charts for: Carmel, Dankworth, Dror, Gentric, Hui, Major '772, Mattavelli., QuickTime, Ramkishor, RealNetworks System, Stockhammer, Van Der Meer, Willebeek-LeMair, Windows Media 9 System.
[7.d.] at least one centralized content server transmitting multimedia objects;	The references below disclose or render obvious “at least one centralized content server transmitting multimedia objects.” <i>See, e.g.:</i> <i>See</i> citations corresponding to [7.d.] in claim charts for: Carmel, Dankworth, Dror, Gentric, Hui, Major '772, Mattavelli, QuickTime, Ramkishor, RealNetworks System, Stockhammer, Van Der Meer, Wang, Willebeek-LeMair, Windows Media 9 System.

EXHIBIT 0
REFERENCES DEMONSTRATING THE OBVIOUSNESS OF U.S. PATENT NO. 10,771,849

'849 Patent Limitations	Exemplary Evidence of Anticipation and/or Obviousness
[7.a.i.] & [7.a.ii.] said multimedia objects including segmented audio and video, and parameters and supplied host path identification;	The references below disclose or render obvious “said multimedia objects including segmented audio and video, and parameters and supplied host path identification.” <i>See, e.g.:</i> <i>See</i> citations corresponding to [7.a.i.] & [7.a.ii.] in claim charts for: Carmel, Dankworth, Dror, Gentric, Hui, Major '772, Mattavelli, QuickTime, RealNetworks System, Stockhammer, Van Der Meer, Willebeek-LeMair, Windows Media 9 System.
[7.b.i.] at least one multimedia player configured to: request transmission of multimedia objects;	The references below disclose or render obvious “at least one multimedia player configured to: request transmission of multimedia objects.” <i>See, e.g.:</i> <i>See</i> citations corresponding to [7.b.i.] in claim charts for: Carmel, Dankworth, Dror, Gentric, Hui, Major '772, Mattavelli, QuickTime, RealNetworks System, Stockhammer, Van Der Meer, Willebeek-LeMair, Windows Media 9 System.
[7.a.i.] receive audio and video segments encoded in a digital encoding format and with an encoding rate;	The references below disclose or render obvious “receive audio and video segments encoded in a digital encoding format and with an encoding rate.” <i>See, e.g.:</i> <i>See</i> citations corresponding to [7.a.i.] in claim charts for: Carmel, Dankworth, Dror, Gentric, Hui, Major '772, Mattavelli, QuickTime, Ramkishor, RealNetworks System, Stockhammer, Van Der Meer, Willebeek-LeMair, Windows Media 9 System.
[7.a.ii.] wherein, said audio and video segments are associated object parameters and supplied host and path identification to form multimedia objects;	The references below disclose or render obvious “wherein, said audio and video segments are associated object parameters and supplied host and path identification to form multimedia objects.” <i>See, e.g.:</i> <i>See</i> citations corresponding to [7.a.ii.] in claim charts for: Carmel, Dankworth, Dror, Gentric, Hui, Major '772, Mattavelli, QuickTime, RealNetworks System, Stockhammer, Van Der Meer, Willebeek-LeMair, Windows Media 9 System.
[7.b.ii.] and wherein said multimedia objects are located using http and received by said	The references below disclose or render obvious “wherein said multimedia objects are located using http and received by said multimedia player from servers using a wireless connection.” <i>See, e.g.:</i>

EXHIBIT 0
REFERENCES DEMONSTRATING THE OBVIOUSNESS OF U.S. PATENT NO. 10,771,849

'849 Patent Limitations	Exemplary Evidence of Anticipation and/or Obviousness
multimedia player from servers using a wireless connection;	<i>See</i> citations corresponding to [7.b.ii.] in claim charts for: Carmel, Dankworth, Dror, Gentric, Guo, Hui, Major '772, Mattavelli, QuickTime, Ramkishor, RealNetworks System, Stockhammer, Van Der Meer, Wang, Willebeek-LeMair, Windows Media 9 System.
[7.c.i.] play back received multimedia objects	The references below disclose or render obvious “play back received multimedia objects.” <i>See, e.g.:</i> <i>See</i> citations corresponding to [7.c.i.] in claim charts for: Carmel, Dankworth, Dror, Gentric, Hui, Major '772, Mattavelli, QuickTime, RealNetworks System, Stockhammer, Van Der Meer, Willebeek-LeMair, Windows Media 9 System.
[7.c.ii.] in a sequence such that fluidity, video quality and audio quality are maintained by selecting a plurality of said multimedia objects that reflect available network bandwidth,	The references below disclose or render obvious “in a sequence such that fluidity, video quality and audio quality are maintained by selecting a plurality of said multimedia objects that reflect available network bandwidth.” <i>See, e.g.:</i> <i>See</i> citations corresponding to [7.c.ii.] in claim charts for: Carmel, Dankworth, Dror, Gentric, Hui, Major '772, Mattavelli, QuickTime, RealNetworks System, Stockhammer, Van Der Meer, Willebeek-LeMair, Windows Media 9 System.
[7.c.iii.] autonomously adjusting said selection and playback according to the multimedia object parameters and supplied host path identification,	The references below disclose or render obvious “autonomously adjusting said selection and playback according to the multimedia object parameters and supplied host path identification.” <i>See, e.g.:</i> <i>See</i> citations corresponding to [7.c.iii.] in claim charts for: Carmel, Dankworth, Dror, Gentric, Hui, Major '772, Mattavelli, QuickTime, RealNetworks System, Stockhammer, Van Der Meer, Willebeek-LeMair, Windows Media 9 System.
[7.c.iv.] and by utilizing optimized decoding processes to maintain quality playback.	The references below disclose or render obvious “utilizing optimized decoding processes to maintain quality playback.” <i>See, e.g.:</i> <i>See</i> citations corresponding to [7.c.iv.] in claim charts for: Carmel, Dankworth, Dror, Gentric, Hui, Major '772, Mattavelli, QuickTime, Ramkishor, RealNetworks System, Stockhammer, Van Der Meer, Wang, Willebeek-LeMair, Windows Media 9 System, Wolters.

EXHIBIT 0
REFERENCES DEMONSTRATING THE OBVIOUSNESS OF U.S. PATENT NO. 10,771,849

'849 Patent Limitations	Exemplary Evidence of Anticipation and/or Obviousness
[8] The method of claim 1, wherein the multimedia objects are created from existing multimedia files that have been transcoded into optimal digital formats at an optimal encoding rates reflecting available network bandwidth, and converting them into audio and video segments by splitting the encoded files into intervals for access by wireless clients.	The references below disclose or render obvious “wherein the multimedia objects are created from existing multimedia files that have been transcoded into optimal digital formats at an optimal encoding rates reflecting available network bandwidth, and converting them into audio and video segments by splitting the encoded files into intervals for access by wireless clients.” <i>See, e.g.:</i> <i>See</i> citations corresponding to [8] in claim charts for: Carmel, Dankworth, Dror, Gentric, Hui, Major '772, QuickTime, Ramkishor, RealNetworks System, Stockhammer, Van Der Meer, Wang, Willebeek-LeMair, Windows Media 9 System, Yu.