Patent(s), Claim(s)	Term/Phrase	Touchstream's Proposed Construction	Cross-reference to Related Paragraphs of Touchstream's Infringement Contentions	Vizbee's Proposed Construction	Cross-reference to Related Paragraphs of Vizbee's Invalidity Contentions
'251 patent, claims 1, 8, 9, 11, 19, 20, 22 '528 patent, claims 1, 12, 16, 25, 27	"synchronization code"	No construction necessary. This term should be given its plain and ordinary meaning, which is "an identifier that can be used to facilitate a connection between two or more devices."	Pages 2, 3, 10, 16, and 17 of Exhibit A to Touchstream's Infringement Contentions (Exhibit 4 at pp. 4-2, 4-3, 4-10, 4-16, and 4-17). Pages 3, 6, 13 and 19 of Exhibit B to Touchstream's Infringement Contentions (Exhibit 4 at pp. 4-25, 4-28, 4-35, and 4-41).	"a unique identifier associated with a particular display device [or content presentation device]"	Exhibit 7 (Ex. A-1 to Vizbee's Invalidity Contentions) at pp. 6, 7, 10, 25, 26, 27, 34. Exhibit 8 (Ex. A-2 to Vizbee's Invalidity Contentions) at pp. 6, 13, 24, 27, 32. Exhibit 10 (Ex. B-1 to Vizbee's Invalidity Contentions) at pp. 2, 3, 12, 13, 24- 26. Exhibit 11 (Ex. B-2 to Vizbee's Invalidity Contentions) at pp. 2, 4, 10, 13, 22, 23. Exhibit 13 (Ex. C-1 Vizbee's Invalidity Contentions) at pp. 2, 4, 8-10, 13, 14. Exhibit 14 (Ex. C-2 to Vizbee's Invalidity

Patent(s), Claim(s)	Term/Phrase	Touchstream's Proposed Construction	Cross-reference to Related Paragraphs of Touchstream's Infringement Contentions	Vizbee's Proposed Construction	Cross-reference to Related Paragraphs of Vizbee's Invalidity Contentions
					Contentions) at pp. 3, 4, 9, 11, 14.
'251 patent, claims 1, 4, 11-15, 22 '528 patent, claims 1-7, 10, 16-24, 27, 28, 30 '289 patent, claims 1, 5, 6, 10, 15, 16[1]	"storing"/"store"	No construction necessary. This term should be given its plain and ordinary meaning, which is "placing in a location for subsequent use."	Pages 3, 6, 10, and 14-16 of Exhibit A to Touchstream's Infringement Contentions (Exhibit 4 at pp. 4-3, 4-6, 4-10, and 4-13 to 4-16). Pages 6, 16, 19, and 22 of Exhibit B to Touchstream's Infringement Contentions (Exhibit 4 at pp. 4-28, 4-38, 4-41, and 4-44). Pages 5, 9, 11, 13, and 15-17 of Exhibit C to Touchstream's	Plain and ordinary meaning, which is: "persistently retaining data or instructions to enable subsequent retrieval" / "to persistently retain data or instructions to enable subsequent retrieval"	Exhibit 7 (Ex. A-1 to Vizbee's Invalidity Contentions) at pp. 10, 20, 24, 27, 32-34. Exhibit 8 (Ex. A-2 to Vizbee's Invalidity Contentions) at pp. 13, 19-21, 23, 27, 30, 31, 35-37. Exhibit 9 (Ex. A-3 to Vizbee's Invalidity Contentions) at pp. 13, 19, 30, 40, 50, 52, 56, 62, 70, 72. Exhibit 10 (Ex. B-1 to Vizbee's Invalidity

[1] Touchstream reserves its right to object to Vizbee's identification of claims 4, 14, and 15 of the '251 patent, claims 2-7, 10, 17-24, and 30 of the '528 patent, and claims 5 and 15 of the '289 patent on the grounds that these claims were not identified in the parties' claim constructions pursuant to Section 8(b) of the Court's Case Management Plan and Scheduling Order.

Patent(s), Claim(s)	Term/Phrase	Touchstream's Proposed Construction	Cross-reference to Related Paragraphs of Touchstream's Infringement Contentions	Vizbee's Proposed Construction	Cross-reference to Related Paragraphs of Vizbee's Invalidity Contentions
			Infringement Contentions (Exhibit 4 at pp. 4-51, 4-55, 4-57, 4-59, and 4-61 to 4-63).		Contentions) at pp. 3, 7, 11, 13, 18-20, 22, 23, 26. Exhibit 11 (Ex. B-2 to Vizbee's Invalidity Contentions) at pp. 4, 7, 8, 10, 13, 16, 17, 19-23, 30, 33. Exhibit 12 (Ex. B-3 to Vizbee's Invalidity Contentions) at pp. 4, 8, 11, 16, 20, 21, 25, 26, 30, 32. Exhibit 13 (Ex. C-1 to Vizbee's Invalidity Contentions) at pp. 4, 6, 7, 10-14. Exhibit 14 (Ex. C-2 to Vizbee's Invalidity Contentions) at pp. 4, 6-9, 11-14, 16, 17. Exhibit 15 (Ex. C-3 to

Patent(s), Claim(s)	Term/Phrase	Touchstream's Proposed Construction	Cross-reference to Related Paragraphs of Touchstream's Infringement Contentions	Vizbee's Proposed Construction	Cross-reference to Related Paragraphs of Vizbee's Invalidity Contentions
					Vizbee's Invalidity Contentions) at pp. 5-7, 9-13.
'251 patent, claims 1, 3, 11-13, 22 '528 patent, claims 1, 9, 14, 16, 24, 27, 28, 29 '289 patent, claims 1, 2, 4, 6, 8, 10, 12, 14, 16	"programming code"	No construction necessary. This term should be given its plain and ordinary meaning, which is "instructions for a computer."	Pages 5, 6, 8, 14-15, 17 and 18 of Exhibit A to Touchstream's Infringement Contentions (Exhibit 4 at pp. 4-5, 4-6, 4-8, 4-13 to 4-15, 4-17, and 4-18). Pages 6-8, 10, 12, 13, 15-18, 20, 21, and 23 of Exhibit B to Touchstream's Infringement Contentions (Exhibit 4 at pp. 4-28 to 4-30, 4-32, 4-34, 4-35, 4-37 to 4-40, 4-42, 4-43, and 4-45). Pages 6, 7, 10, 11, 13, 14, 17, and 18 of	"display-device- or media-player-specific executable code"	Exhibit 7 (Ex. A-1 to Vizbee's Invalidity Contentions) at pp. 16, 20, 23, 32, 33, 35, 38. Exhibit 8 (Ex. A-2 to Vizbee's Invalidity Contentions) at pp. 15, 18, 22, 27, 30, 31, 35-37. Exhibit 9 (Ex. A-3 to Vizbee's Invalidity Contentions) at pp. 15-18, 32, 34, 36, 50-52, 54, 55, 71, 73. Exhibit 10 (Ex. B-1 to Vizbee's Invalidity Contentions) at pp. 6, 7, 10, 18, 19, 21, 22, 27, 31.

Patent(s), Claim(s)	Term/Phrase	Touchstream's Proposed Construction	Cross-reference to Related Paragraphs of Touchstream's Infringement Contentions	Vizbee's Proposed Construction	Cross-reference to Related Paragraphs of Vizbee's Invalidity Contentions
			Exhibit C to Touchstream's Infringement Contentions (Exhibit 4 at pp. 4-52, 4-53, 4-56, 4-57, 4-59, 4-60, 4-63, and 4-64).		Exhibit 11 (Ex. B-2 to Vizbee's Invalidity Contentions) at pp. 5, 7, 9, 10, 12, 16, 17, 19, 22, 26, 28, 31, 33. Exhibit 12 (Ex. B-3 to Vizbee's Invalidity Contentions) at pp. 5-7, 13, 14, 20-24, 31-33. Exhibit 13 (Ex. C-1 to Vizbee's Invalidity Contentions) at pp. 6, 7, 11-14, 16. Exhibit 14 (Ex. C-2 to Vizbee's Invalidity Contentions) at pp. 5, 6, 8, 10, 12, 14-17. Exhibit 15 (Ex. C-3 to Vizbee's Invalidity Contentions) at pp. 5, 6, 8, 10, 11, 13.

Exhibit 1 to Joint Disputed Claim Terms Charts for
U.S. Pat. Nos. 8,356,251 ("the '251 patent"), 8,782,528 ("the '528 patent") and 8,904,289 ("the '289 patent")
Touchstream Technologies, Inc. v. Vizbee, Inc. Case No. 1:17-cv-06247-PGG

Patent(s), Claim(s)	Term/Phrase	Touchstream's Proposed Construction	Cross-reference to Related Paragraphs of Touchstream's Infringement Contentions	Vizbee's Proposed Construction	Cross-reference to Related Paragraphs of Vizbee's Invalidity Contentions
'251 patent, claims 1, 11	"universal playback control command"	No construction necessary. This term should be given its plain and ordinary meaning, which is "command for controlling playing of content."	Pages 5, 6, and 12-14 of Exhibit A to Touchstream's Infringement Contentions (Exhibit 4 at pp. 4-5, 4-6, and 4-12 to 4-14).	"a device- and media-player-independent command"	Exhibit 7 (Ex. A-1 to Vizbee's Invalidity Contentions) at pp. 14, 16, 19, 20, 32, 33. Exhibit 10 (Ex. B-1 to Vizbee's Invalidity Contentions) at pp. 5-8, 16, 18, 19. Exhibit 13 (Ex. C-1 to Vizbee's Invalidity Contentions) at pp. 6, 11, 12.
'251 patent, claims 1, 11, 22	"playback control command"	No construction necessary. This term should be given its plain and ordinary meaning, which is "command for controlling playing of content."	Pages 5, 13, and 17-19 of Exhibit A to Touchstream's Infringement Contentions (Exhibit 4 at pp. 4-5, 4-13, and 4-17 to 4-19).	"a device- and media-player-independent command"	Exhibit 7 (Ex. A-1 to Vizbee's Invalidity Contentions) at pp. 19, 32, 35, 37, 38. Exhibit 10 (Ex. B-1 to Vizbee's Invalidity Contentions) at pp. 7, 18, 28, 29, 31-33, 35 Exhibit 13 (Ex. C-1 to Vizbee's Invalidity

Patent(s), Claim(s)	Term/Phrase	Touchstream's Proposed Construction	Cross-reference to Related Paragraphs of Touchstream's Infringement Contentions	Vizbee's Proposed Construction	Cross-reference to Related Paragraphs of Vizbee's Invalidity Contentions
					Contentions) at pp. 6, 12, 14-16.
'251 patent, claims 1, 2, 3, 4, 11, 12, 13, 22, 26 '528 patent, claims 1, 8, 10, 14, 16, 23, 24, 27, 28, 30 '289 patent, claims 1, 2, 5, 6, 8, 10, 11, 12, 15, 16	"media player"	No construction necessary. This term should be given its plain and ordinary meaning, which is "a computer application operable to present content and control presentation of content."	Pages 1, 4-10, 12-19, and 22 of Exhibit A to Touchstream's Infringement Contentions (Exhibit 4 at pp. 4-1, 4-4 to 4-10, 4-12 to 4-19, and 4-22). Pages 1, 4, 5, 6, 8, 10-13, and 15-24 of Exhibit B to Touchstream's Infringement Contentions (Exhibit 4 at pp. 4-23, 4-26, 4-27, 4-29, 4-30, 4-32 to 4-35, and 4-37 to 4-46). Pages 1 and 4-18 of Exhibit C to Touchstream's Infringement Contentions (Exhibit 4	"software application for playing video content"	Exhibit 7 (Ex. A-1 to Vizbee's Invalidity Contentions) at pp. 1, 11, 14, 16, 19-24, 27, 32-40. Exhibit 8 (Ex. A-2 to Vizbee's Invalidity Contentions) at pp. 1, 6, 15-18, 21,23, 27, 30-32, 35-37. Exhibit 9 (Ex. A-3 to Vizbee's Invalidity Contentions) at pp. 1, 9, 11, 15-17, 19, 27, 28, 32, 34-36, 46, 48, 49, 51-54, 56, 60, 67, 68, 70, 71, 73, 74. Exhibit 10 (Ex. B-1 to Vizbee's Invalidity Contentions) at pp. 1, 4-

Patent(s), Claim(s)	Term/Phrase	Touchstream's Proposed Construction	Cross-reference to Related Paragraphs of Touchstream's Infringement Contentions	Vizbee's Proposed Construction	Cross-reference to Related Paragraphs of Vizbee's Invalidity Contentions
			at pp. 4-47 and 4-50 to 4-64).		12, 15, 18, 19, 21-23, 25, 27, 29-35, 37. Exhibit 11 (Ex. B-2 to Vizbee's Invalidity Contentions) at pp. 1, 2, 5-7, 9-12, 14, 16-19, 21, 22, 24, 26-29, 31-33. Exhibit 12 (Ex. B-3 to Vizbee's Invalidity Contentions) at pp. 1-3, 5, 6, 8, 9, 12-15, 18, 20-23, 25, 28, 30-33. Exhibit 13 (Ex. C-1 to Vizbee's Invalidity Contentions) at pp. 1, 5-7, 9, 11-17. Exhibit 14 (Ex. C-2 to Vizbee's Invalidity Contentions) at pp. 1, 3, 5, 6, 8-17. Exhibit 15 (Ex. C-3 to Vizbee's Invalidity

Patent(s), Claim(s)	Term/Phrase	Touchstream's Proposed Construction	Cross-reference to Related Paragraphs of Touchstream's Infringement Contentions	Vizbee's Proposed Construction	Cross-reference to Related Paragraphs of Vizbee's Invalidity Contentions
					Contentions) at pp. 1, 4-8, 10-14.
'528 patent, claims 1, 9, 10, 11, 14, 16, 24, 27-30 '289 patent, claims 1, 4, 5, 6, 10, 14, 15, 16	"action control command"	No construction necessary. This term should be given its plain and ordinary meaning, which is "command for controlling playing of content."	Pages 5, 7, 11, 12, 15, 16, 18, 20, and 22-24 of Exhibit B to Touchstream's Infringement Contentions (Exhibit 4 at pp. 4-27, 4-29, 4-33, 4-37, 4-38, 4-40, 4-42, and 4-44 to 4-46). Pages 4-6, 8-10, and 12-17 of Exhibit C to Touchstream's Infringement Contentions (Exhibit 4 at pp. 4-50 to 4-52, 4-54 to 4-56, and 4-58 to 4-63).	"a device- and media-player-independent command"	Exhibit 8 (Ex. A-2 to Vizbee's Invalidity Contentions) at pp. 6, 15, 22, 23, 25, 27, 30, 31, 35-37. Exhibit 9 (Ex. A-3 to Vizbee's Invalidity Contentions) at pp. 11, 15, 18, 19, 28, 32, 48, 50, 52, 55, 56, 68, 71, 73. Exhibit 11 (Ex. B-2 to Vizbee's Invalidity Contentions) at pp. 2, 5, 9, 10, 14, 16, 17, 22, 24, 26, 29, 31, 33. Exhibit 12 (Ex. B-3 to Vizbee's Invalidity Contentions) at pp. 3, 5, 7-9, 13, 18, 20, 21, 24,

Patent(s), Claim(s)	Term/Phrase	Touchstream's Proposed Construction	Cross-reference to Related Paragraphs of Touchstream's Infringement Contentions	Vizbee's Proposed Construction	Cross-reference to Related Paragraphs of Vizbee's Invalidity Contentions
					25, 28, 31, 32. Exhibit 14 (Ex. C-2 to Vizbee's Invalidity Contentions) at pp. 3, 5, 8-10, 12, 14-17. Exhibit 15 (Ex. C-3 to Vizbee's Invalidity Contentions) at pp. 4-8, 10-13.
'289 patent, claims 10, 16	"an identification code assigned by the server system to the content presentation device and received by the server system in a message generated by the personal	The server system associates identification information of a content presentation device based on information provided to the server system from a personal computing device.	Pages 11, 12, 15, and 16 of Exhibit C to Touchstream's Infringement Contentions (Exhibit 4 at pp. 4-57, 4-58, 4-61, and 4-62).	Plain and ordinary meaning, which is "a unique identifier assigned by the server system to the content presentation device and received by the server system in a message generated by the personal computing device"	Exhibit 9 (Ex. A-3 to Vizbee's Invalidity Contentions) at pp. 40, 62. Exhibit 12 (Ex. B-3 to Vizbee's Invalidity Contentions) at pp. 16, 26. Exhibit 15 (Ex. C-3 to Vizbee's Invalidity Contentions) at pp. 9, 12.

Patent(s), Claim(s)	Term/Phrase	Touchstream's Proposed Construction	Cross-reference to Related Paragraphs of Touchstream's Infringement Contentions	Vizbee's Proposed Construction	Cross-reference to Related Paragraphs of Vizbee's Invalidity Contentions
	computing device"				
'251 patent, claim 1	"assigning, by a server system, a synchronization code to the display device; receiving, in the server system, a message from a personal computing device that is separate from the server system and separate from the display device, wherein the message includes the synchronization code"	Associating identification information of a display device based on information that is received by the server from a personal computing device that allows communication among the server system and the different devices.	Pages 1-3 of Exhibit A to Touchstream's Infringement Contentions (Exhibit 4 at pp. 4-1 to 4-3).	"assigning, by a server system, a unique identifier to the display device; receiving, in the server system, a message from a personal computing device that is separate from the server system and separate from the display device, wherein the message includes the unique identifier"	Exhibit 7 (Ex. A-1 to Vizbee's Invalidity Contentions) at pp. 6-7. Exhibit 10 (Ex. B-1 to Vizbee's Invalidity Contentions) at pp. 2-3. Exhibit 13 (Ex. C-1 to Vizbee's Invalidity Contentions) at p. 2.

Patent(s), Claim(s)	Term/Phrase	Touchstream's Proposed Construction	Cross-reference to Related Paragraphs of Touchstream's Infringement Contentions	Vizbee's Proposed Construction	Cross-reference to Related Paragraphs of Vizbee's Invalidity Contentions
'251 patent, claim 11	"a synchronization code assigned by the server system to the display device and received by the server system in a message from the personal computing device"	The server system associates identification information of a content presentation device based on information provided to the server system from a personal computing device.	Pages 10 and 11 of Exhibit A to Touchstream's Infringement Contentions (Exhibit 4 at pp. 4-10 and 4-11).	"a unique identifier associated with the display device that is the assigned by the server system to the display device and received by the server system in a message from the personal computing device"	Exhibit 7 (Ex. A-1 to Vizbee's Invalidity Contentions) at p. 27. Exhibit 10 (Ex. B-1 to Vizbee's Invalidity Contentions) at p. 13. Exhibit 13 (Ex. C-1 to Vizbee's Invalidity Contentions) at p. 10.
'251 patent, claim 22	"a synchronization code that was assigned to the display device by a server system, the server system subsequently storing, based on a message from a personal computing	The server system associates identification information of a content presentation device based on information provided to the server system from a personal computing device that allows communication	Pages 16 and 17 of Exhibit A to Touchstream's Infringement Contentions (Exhibit 4 at pp. 4-16 and 4-17).	"a unique identifier associated with the display device that was assigned to the display device by a server system, the server system subsequently retaining persistently to enable subsequent retrieval, based on a message from a	Exhibit 7 (Ex. A-1 to Vizbee's Invalidity Contentions) at p. 34. Exhibit 10 (Ex. B-1 to Vizbee's Invalidity Contentions) at pp. 25-26. Exhibit 13 (Ex. C-1 to Vizbee's Invalidity Contentions) at p. 14.

Patent(s), Claim(s)	Term/Phrase	Touchstream's Proposed Construction	Cross-reference to Related Paragraphs of Touchstream's Infringement Contentions	Vizbee's Proposed Construction	Cross-reference to Related Paragraphs of Vizbee's Invalidity Contentions
	device that is separate from the server system and the display device, an association between the display device and the personal computing device, the message from the personal computing device including the synchronization code"	among the server system and the different devices.		personal computing device that is separate from the server system and the display device, an association between the display device and the personal computing device, the message from the personal computing device including the unique identifier."	
'528 patent, claim 16	"a synchronization code assigned by the server system to the content presentation device and	The server system associates identification information of a content presentation device based on information	Page 13 of Exhibit B to Touchstream's Infringement Contentions (Exhibit 4 at p. 4-35).	"a unique identifier associated with the content presentation device that was assigned by the server system to the	Exhibit 8 (Ex. A-2 to Vizbee's Invalidity Contentions) at p. 27. Exhibit 11 (Ex. B-2 to Vizbee's Invalidity

Patent(s), Claim(s)	Term/Phrase	Touchstream's Proposed Construction	Cross-reference to Related Paragraphs of Touchstream's Infringement Contentions	Vizbee's Proposed Construction	Cross-reference to Related Paragraphs of Vizbee's Invalidity Contentions
	received by the server system in a message generated by the personal computing device"	provided to the server system from a personal computing device.		content presentation device and received by the server system in a message generated by the personal computing device"	Contentions) at p. 13. Exhibit 14 (Ex. C-2 to Vizbee's Invalidity Contentions) at p. 11.