

EXHIBIT C
DEFENDANTS' JOINT PROPOSED CLAIM CONSTRUCTIONS

I. DISPUTED TERMS

Claim Term	Defendants' Proposed Construction	Defendants' Supporting Intrinsic Evidence	Defendants' Supporting Extrinsic Evidence
"acoustic noise" ('072 claims 1, 2, 9) ('091 claims 1, 9, 11, 15, 18)	"any acoustic signal that is not desired"	<p>The '091 patent in its entirety, including for example, Abstract, Figs. 5, 9-11, 1:16-18, 1:48-51, 2:54-55, 2:61-63, 2:67-3:2, 7:56-60, 8:33-34, 8:57-59, 9:5-7, 9:63-67, 10:55-62, 11:59-62, 12:51-53, 12:66-13:3, 13:15-16, 15:14-18, 15:25-27, 15:58-63, 16:3-4, 16:25-29, 16:47-51, 16:61-63, 17:8-12.</p> <p>Prosecution History of the '091 Patent, Apr. 28, 2011 Applicant Appeal Brief at 12-18; Jun. 24, 2010 Amendments and corresponding Applicant Arguments/Remarks at 8-9, 11-16; Sep. 11, 2009 Amendments and corresponding Applicant Arguments/Remarks at 9-12; Jan. 9, 2009 Amendments and corresponding Applicant Arguments/Remarks at 15-17; Jul. 23, 2007 Amendments and</p>	

		<p>corresponding Applicant Arguments/Remarks at 16, 19.</p> <p>The '072 patent in its entirety, including for example, 1:24-25, 3:4-7, 3:19-21, 3:36-40, 4:40-63, 5:39-45, 5:59-62, 10:41-43, 13:64-67, 14:19-23.</p>	
“virtual microphone array” ('072 claim 1)	“two or more virtual microphones used together, each virtual microphone is constructed using two or more physical omnidirectional microphones and associated signal processing, wherein at least one physical omnidirectional microphone is common to all of the virtual microphones.”	<p>The '072 patent in its entirety, including for example, FIGs. 4-6, FIG. 9, FIG. 10, FIG. 2, FIGs. 14-15, Abstract, 1:16-18, 1:22-47, 2:38-54, 2:58-60, 3:1-3, 3:46-49, 3:56-65, 4:11-14, 6:33-7:35, 8:1-36, 9:45-47, 9:58-59, 9:64-10-7, 10:44-11:33, 11:34-12:52, 13:38-53, 14:1-32, 21:33-37, 21:47-49, 22:16-35, 23:23-25, 23:64-24:9, 24:60-62, 25:5-7, 26:25-27, 27:45-50, 29:35, claim 2, claim 9.</p>	<p>Expert testimony of Sayfe Kia, one skilled in the art, understands the context of the patent to require a virtual microphone array, constructed together, of microphones using two or more omnidirectional microphones and associated signal processing, wherein at least one physical omnidirectional microphone is common to all of the virtual microphones, based on the intrinsic and extrinsic evidence.</p> <p>The Collins Science (2021) (SJAW_0</p>

<p>“a signal processor coupled with the first and second microphone signals and operative ... to apply a varying linear transfer function between the first and second microphone signals” (’357 claim 1 and 15)</p> <p>“a processing component ... applying a varying linear transfer function between the acoustic signals” (’080 claim 14)</p>	<p>“a signal processor coupled with the first and second microphone signals and operative ... to apply a varying linear transfer function to the first microphone signal and to apply the varying linear transfer function to the second microphone signal.”</p> <p>“a processing component ... applying a varying linear transfer function to the acoustic signals received from the first virtual microphone and applying the varying linear transfer function to the acoustic signals received from the second virtual microphone.”</p> <p>Otherwise indefinite.</p>	<p>’357 patent at 4:44-56, 8:19-35, 18:29-42, 20:43-59, 21:8-20, 22:30-48, 25:36-59, 28:4-22, 29:54-30:5.</p> <p>The ’357 patent file history in its entirety, including for example, October 21, 2014 Final rejection, pp. 3-4.</p> <p>’080 patent at 4:52-5:18, 5:39-6:41, 6:42-62, 6:63-7:16, 7:39-8:12 10:18-27, 10:39-11:13, 11:20-13:24, 15:55-16:45, 28:64-29:4.</p>	<p>Expert testimony from Sayfe Kia, one skilled in the art, understanding the varying linear transfer function between the first and second microphone signals in the context of the patent to mean “to apply a varying linear transfer function to the first microphone signal and to apply the varying linear transfer function to the second microphone signal” in the patent to mean “to apply a varying linear transfer function to the acoustic signals received from the first virtual microphone and applying the varying linear transfer function to the acoustic signals received from the second virtual microphone.” Otherwise</p>
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			these terms because the light of the specification, histories, reasonable, skilled in the scope of the
<p>“response to [speech/noise]”/“linear response to [speech/noise]” ('357 claims 1, 15, 17) ('080 claims 1, 7, 9, 14) ('691 claims 1, 3-7, 23-34, 41-45)</p>	<p>“[linear] sensitivity in the direction of [speech/noise]”</p>	<p>The '080 patent in its entirety, including for example, FIGs. 9-13, Abstract, 2:52-3:4, 7:66-49, 10:18-61, 28:64-29:4.</p> <p>The '691 patent in its entirety, including for example, FIGs. 9-13, Abstract, 1:15-17, 1:21-46, 2:17-60, 3:38-39, 3:62-67, 4:61-67, 11:21-12:35, 18:58-63, 20:5-12, 21:3-12, 21:53-22:3, 22:30-37, 24:22-29, 24:59-25:5, 25:39-48, 26:55-27-12, 27:65-28:3, 29:5-16, 29:60-67, 31:28-32:10, 32:44-47.¹</p> <p>The '691 patent file history in its entirety, including for example, July 14, 2011 Non-final Rejection, p. 3-4; January 17, 2012 Applicant Arguments and Amendment, p. 16; September</p>	<p>Expert testimony by Sayfe Kia, one skilled in the art, understands that to [speech/noise] “[linear] sensitivity in the direction of [speech/noise]” is a review of extrinsic evidence to determine the meaning of the indefinite term “linear” read in light of the specification, histories, reasonable, skilled in the art, in the scope of the</p>

¹ The '357 patent is a continuation of the '691 patent, and thus share a specification. Accordingly, only citations to the '691 patent are provided.

		10, 2012 Applicant Arguments, pp. 2-14. The '357 patent file history in its entirety, including for example, May 12, 2014, Office Action pp. 4-5.	
“an adaptive noise removal application coupled to . . . and generating” (’080 claims 1, 7)	Indefinite	The ’080 patent in its entirety, including for example, 4:52-5:18, 5:39-6:41, 6:42-62, 7:4-16, 7:39-8:12 10:18-27, 10:39-11:13, 11:20-13:24, 15:55-16:45, 28:64-29:4.	Samsung testimony Kiaei that term is inc claims, re patent’s s prosecutio inform, w certainty, art as to th invention.
“an adaptive noise removal application . . . generating denoised output signals by forming a plurality of combinations . . . by filtering and summing the plurality of combinations . . . and by a varying linear transfer function between the plurality of combinations” (’080 claims 1, 7)	Indefinite	The ’080 patent in its entirety, including for example, 4:53-16, 7:39-8:12 10:18-27, 10:39-11:13, 11:20-13:24, 15:55-16:45, 28:64-29:4.	Expert tes Sayfe Kia of this ter the claims patent’s s prosecutio inform, w certainty, art as to th invention.
“microphone” (’543 claims 1, 26)	“physical microphone”	The ’543 patent at 3:63-4:3, 5:42-45, 5:58-62, 6:45-8:3, 11:1-16, 11:26-37, 12:32-40, 13:34-52, 14:23-38, 17:50-51,	HANDBO ENGINEE (SJAWE_0

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