

Table 1 - Listing Each Claim Element Annotated With Its Claim Number and a Reference Letter:

Claim Code	IPR2015-01391 '898 Patent Claim Elements 1-28
1	An adaptive system for processing digital input data representing signals containing a source signal from a signal source on-axis relative to an array of sensors as well as interference signals from interference sources located off-axis from the signal source and for producing digital output data representing the source signal with reduced interference signals relative to the source signal, comprising: (Ex. 1001, 11:21-27)
1a	a main channel matrix unit for generating a main channel from the digital input data, the main channel representing signals received in the direction of the signal source and having a source signal component and an interference signal component; (11:28-32)
1b	a reference channel matrix unit for generating at least one reference channel from the digital input data, each reference channel representing signals received in directions other than that of the signal source; (11:33-36)
1c	at least one adaptive filter having adaptive filter weights, connected to receive signals from the reference channel matrix unit, for

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	generating a cancelling signal approximating the interference signal component of the main channel; (11:37-41)
1d	a difference unit, connected to receive signals from the main channel matrix unit and said at least one adaptive filter, for generating the digital output data by subtracting the cancelling signal from the main channel; (11:42-45)
1e	said at least one adaptive filter also being connected to receive the digital output data and including weight updating means for finding new filter weight values of said at least one adaptive filter such that the difference between the main channel and the cancelling signal is minimized; and (11:46-52)
1f	weight constraining means for truncating said new filter weight values to predetermined threshold values when each of the new filter weight values exceeds the corresponding threshold value. (53-56)
2	The system of claim 1, further comprising at least one decolorizing filter for filtering said at least one reference channel so that it has a frequency spectrum whose magnitude is substantially flat over a predetermined frequency range. (11:57-61)

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3	The system of claim 1, further comprising inhibiting means, connected to receive signals from the main channel matrix unit and the reference channel matrix unit, for estimating the power of the main channel and the power of said at least one reference channel and for generating an inhibit signal to said weight updating means when a normalized power difference between the main channel and said at least one reference channel is positive. (11:62-12:2)
4	The system of claim 1 wherein the sensors are microphones. (12:3-4)
5	An adaptive system for processing digital input data representing signals containing a source signal from a signal source on-axis relative to an array of sensors as well as interference signals from interference sources located off-axis from the signal source and for producing digital output data representing the source signal with reduced interference signals relative to the source signal, comprising: (12:5-11)
5a	a main channel matrix unit for generating a main channel from the digital input data, the main channel representing signals received in the direction of the signal source and having a source signal

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	component and an interference signal component; (12:12-15)
5b	a reference channel matrix unit for generating at least one reference channel from the digital input data, each reference channel representing signals received in directions other than that of the signal source; (12:16-19)
5c	at least one adaptive filter having adaptive filter weights, connected to receive signals from the reference channel matrix unit, for generating a cancelling signal approximating the interference signal component of the main channel; (12:20-24)
5d	a difference unit, connected to receive signals from the main channel matrix unit and said at least one adaptive filter, for generating digital output data by subtracting the cancelling signal from the main channel; (12:25-28)
5e	said at least one adaptive filter also being connected to receive the digital output data and including weight updating means for finding new filter weight values of said at least one adaptive filter such that the difference between the main channel and the cancelling signal is minimized; and (12:29-34)

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5f	weight constraining means for converting the new filter weight values to frequency representation values, truncating the frequency representation values to predetermined threshold values, and converting them back to adaptive filter weights. (12:35-39)
6	The system of claim 5, further comprising at least one decolorizing filter for filtering said at least one reference channel so that it has a frequency spectrum whose magnitude is substantially flat over a predetermined frequency range. (12:40-44)
7	The system of claim 5, further comprising inhibiting means, connected to receive signals from the main channel matrix unit and the reference channel matrix unit, for estimating the power of the main channel and the power of said at least one reference channel and for generating an inhibit signal to said weight updating means when a normalized power difference between the main channel and said at least one reference channel is positive. (12:45-52)
8	The system of claim 5 wherein the sensors are microphones. (12:53-54)
9	An adaptive system for receiving a source signal from a signal source

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