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

Claim Code	IPR2015-01394 U.S. Patent 6,363,345 Patent Claim Elements 1-25, 38-47
1	An apparatus for canceling noise, comprising: [Ex. 1001, 9:35]
1a	an input for inputting an audio signal which includes a noise signal; [9:36-37]
1b	a frequency spectrum generator for generating the frequency spectrum of said audio signal thereby generating frequency bins of said audio signal; and [9:38-40]
1c	a threshold detector for setting a threshold for each frequency bin using a noise estimation process and for detecting for each frequency bin whether the magnitude of the frequency bin is less than the corresponding threshold, thereby detecting the position of noise elements for each frequency bin. [9:41-46]
2	The apparatus according to claim 1, wherein said threshold detector detects the position of a plurality of non-speech data points for said frequency bins. [9:47-49]

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3	The apparatus according to claim 2, wherein said threshold detector detects the position of said plurality of non-speech data points for said frequency bins within a continuous speech segment of said audio signal. [9:50-53]
4	The apparatus according to claim 1, wherein said threshold detector sets the threshold for each frequency bin in accordance with a current minimum value of the magnitude of the corresponding frequency bin; said current minimum value being derived in accordance with a future minimum value of the magnitude of the corresponding frequency bin. [9:54-60]
5	The apparatus according to claim 4, wherein said future minimum value is determined as the minimum value of the magnitude of the corresponding frequency bin within a predetermined period of time. [9:61-64]
6	The apparatus according to claim 5, wherein said current minimum value is set to said future minimum value periodically. [9:65-67]

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7	The apparatus according to claim 6, wherein said future minimum value is replaced with the current magnitude value when said future minimum value is greater than said current magnitude value. [10:1-4]
8	The apparatus according to claim 6, wherein said current minimum value is replaced with the current magnitude value when said current minimum value is greater than said current magnitude value. [10:5-8]
9	The apparatus according to claim 5, wherein said future minimum value is set to a current magnitude value periodically; said current-magnitude value being the value of the magnitude of the corresponding frequency bin. [10:9-12]
10	The apparatus according to claim 4, wherein said current minimum value is determined as the minimum value of the magnitude of the corresponding frequency bin within a predetermined period of time. [10:13-15]

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11	The apparatus according to claim 4, wherein said threshold is set by multiplying said current minimum value by a coefficient. [10:16-18]
12	The apparatus according to claim 1, further comprising an averaging unit for determining a level of said noise within said respective frequency bin, wherein said threshold detector detects the position of said noise elements where said level of said noise determined by said averaging unit is less than the corresponding threshold. [10:19-24]
13	The apparatus according to claim 1, further comprising a subtractor for subtracting said noise elements estimated at said positions determined by said threshold detector from said audio signal to derive said audio signal substantially without said noise. [10:25-29]
14	The apparatus according to claim 13, wherein said subtractor performs subtraction using a filter multiplication which multiplies said audio signal by a filter function. [10:30-32]
15	The apparatus according to claim 14, wherein said filter function is a Wiener filter function which is a function of said frequency bins of

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	said noise elements and magnitude. [10:33-35]
16	The apparatus according to claim 15, wherein said filter multiplication multiplies the complex elements of said frequency bins by said Weiner filter function. [10:36-38]
17	The apparatus according to claim 13, further comprising a residual noise processor for reducing residual noise remaining after said subtractor subtracts said noise elements at said positions determined by said threshold detector from said audio signal. [10:39-43]
18	The apparatus according to claim 17, wherein said residual noise processor replaces said frequency bins corresponding to non-speech segments of said audio signal with a minimum value. [10:44-47]
19	The apparatus according to claim 18, wherein said residual noise processor includes a voice switch for detecting said non-speech segments. [10:48-50]
20	The apparatus according to claim 18, wherein said residual noise processor includes another threshold detector for detecting said non-

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