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

Claim Code	IPR2015-1393 U.S. Patent 6,049,607 Patent Claim Elements 1-12 and 25-37
1	An interference canceling apparatus for canceling, from a target signal generated from a target source, an interference signal generated by an interference source, said apparatus comprising: [Ex. 1001, 10:11-14]
1a	a main input for inputting said target signal; [10:15]
1b	a reference input for inputting said interference signal; [10:16]
1c	a beam splitter for beam-splitting said target signal into a plurality of band-limited target signals and beam-splitting said interference signal into band-limited interference signals, wherein the amount and frequency of band-limited target signals equal the amount and frequency of band-limited interference signals, whereby for each band-limited target signal there is a corresponding band-limited interference signal; [10:17-24]
1d	an adaptive filter for adaptively filtering, each band-limited interference signal from each corresponding band-limited target

Claim Code	IPR2015-1393 U.S. Patent 6,049,607 Patent Claim Elements 1-12 and 25-37
	signal. [10:25-27]
2	The apparatus according to claim 1, wherein said target signal represents speech generated at a near end of a teleconference, said reference signal represents said target signal broadcast from a far end of said teleconference and said interference signal represents an echo generated by said broadcast of said reference signal of said far end. [10:28-33]
3	The apparatus according to claim 2, wherein said adaptive filter is an adaptive filter array with each adaptive filter in said array filtering a different frequency band. [10:34-36]
4	The apparatus according to claim 2, wherein said adaptive filter estimates a transfer function of said reference signal broadcast of said far end. [10:37-39]
5	The apparatus according to claim 4, further comprising an inhibitor for permitting said adaptive filter to change coefficients when a signal-to-noise ratio of said reference signal exceeds a predetermined threshold over a signal-to-noise ratio of said main signal. [10:40-44]

Claim Code	IPR2015-1393 U.S. Patent 6,049,607 Patent Claim Elements 1-12 and 25-37
6	The apparatus according to claim 5, wherein said inhibitor determines said predetermined threshold periodically. [10:45-47]
7	The apparatus according to claim 2, wherein said beam splitter is a DFT filter bank using single side band modulation. [10:48-50]
8	The apparatus according to claim 2, further comprising a beam selector for selecting at least one of a plurality of beams for adaptive filtering by said adaptive filter representing a direction from which said main signal is received. [10:51-54]
9	The apparatus according to claim 8, wherein said adaptive filter updates coefficients representing said transform function and comprehensively stores said coefficients for each beam selected by said beam selector. [10:55-58]
10	The apparatus according to claim 8, wherein said beam selector selects said plurality of said beams for simultaneous adaptive filtering by said adaptive filter. [10:59-61]
11	The apparatus according to claim 10, wherein said beam selector

Claim Code	IPR2015-1393 U.S. Patent 6,049,607 Patent Claim Elements 1-12 and 25-37
	selects a beam having a fixed direction and a beam which rotates in direction. [10:62-64]
12a	The apparatus according to claim 2, further comprising a noise gate for gating said main signal adaptively filtered by said adaptive filter by opening said noise gate when a signal-to-noise ratio at the near end is above a predetermined threshold and gradually closing said noise gate when said signal-to-noise ratio at the near end is below the predetermined threshold; [10:65-11:1-4]
12b	wherein said noise gate determines said predetermined threshold by selecting a low threshold when a signal-to-noise ratio of said reference signal of the far end is low, updating said predetermined threshold upwards when said signal-to-noise ratio of said reference signal of the far end goes up and gradually reducing said predetermined threshold when said signal-to-noise ratio of the reference signal at the far end goes down. [11:4-11]
25	An interference canceling method for canceling, from a target signal generated from a target source, an interference signal generated by an

Claim Code	IPR2015-1393 U.S. Patent 6,049,607 Patent Claim Elements 1-12 and 25-37
	interference source, said method comprising the steps of: [12:15-18]
25a	inputting said target signal; [12:19]
25b	inputting said interference signal; [12:20]
25c	beam-splitting said target signal into a plurality of band-limited target signals and beam-splitting said interference signal into band-limited interference signals, wherein the amount and frequency of band-limited target signals equal the amount and frequency of band-limited interference signals, whereby for each band-limited target signal there is a corresponding band-limited interference signal; and [12:21-28]
25d	adaptively filtering, each band-limited interference signal from each corresponding band-limited target signal. [12:28-29]
26	The method according to claim 25, wherein said target signal represents speech generated at a near end of a teleconference, said reference signal represents said target signal broadcast from a far end of said teleconference and said interference signal represents an echo

DOCKET ALARM

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts

Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research

With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips

Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS
Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS
Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS
Sync your system to PACER to automate legal marketing.