

Title (en)

System and method for detecting location of sound sources in a three-dimensional space

Title (de)

System und Verfahren zur Ortung von Schallquellen in einem dreidimensionalen Raum

Title (fr)

Système et procédé de localisation de sources acoustiques dans un espace tridimensionnel

Publication

**EP 2988527 A1 20160224 (EN)**

Application

**EP 14461561 A 20140821**

Priority

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Abstract (en)

System and method for detecting location of sound sources in a three-dimensional space using linear microphone arrays comprising a plurality of microphones wherein the microphones are located in at least two groups of at least two microphones wherein each group has a different spacing of the respective microphones. Three such linear microphone arrays are used wherein first ends of all three microphone arrays, comprising the same arrangement of microphones, are in proximity or adjacent to each other; and the separate microphone arrays are positioned in different planes in three-dimensional space.

IPC 8 full level

**H04R 1/40** (2006.01); **H04R 3/00** (2006.01)

CPC (source: EP)

**H04R 1/406** (2013.01); **H04R 3/005** (2013.01); **H04R 2201/401** (2013.01); **H04R 2201/403** (2013.01); **H04R 2201/405** (2013.01)

Citation (applicant)

- US 7090117 B2 20060815 - LACKEY ROBERT W [US], et al
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Citation (search report)

- [XYI] US 5848170 A 19981208 - MAHIEUX YANNICK [FR], et al
- [Y] US 2014192999 A1 20140710 - SANNINO ROBERTO [IT]
- [A] ZHENG Y R ET AL: "EXPERIMENTAL EVALUATION OF A NESTED MICROPHONE ARRAY WITH ADAPTIVE NOISE CANCELLERS", IEEE TRANSACTIONS ON INSTRUMENTATION AND MEASUREMENT, IEEE SERVICE CENTER, PISCATAWAY, NJ, US, vol. 53, no. 3, 1 June 2004 (2004-06-01), pages 777 - 786, XP001199042, ISSN: 0018-9456, DOI: 10.1109/TIM.2004.827304
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- [A] FLANAGAN J L ET AL: "COMPUTER-STEERED MICROPHONE ARRAYS FOR SOUND TRANSDUCTION IN LARGE ROOMS", THE JOURNAL OF THE ACOUSTICAL SOCIETY OF AMERICA, AMERICAN INSTITUTE OF PHYSICS FOR THE ACOUSTICAL SOCIETY OF AMERICA, NEW YORK, NY, US, vol. 78, no. 5, 1 November 1985 (1985-11-01), pages 1508 - 1518, XP000195783, ISSN: 0001-4966, DOI: 10.1121/1.392786

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