

Title (en)  
A METHOD AND APPARATUS FOR LANGUAGE AND SPEAKER RECOGNITION

Publication  
**EP 0484455 A4 19930310 (EN)**

Application  
**EP 90913683 A 19900720**

Priority  
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Abstract (en)  
[origin: WO9102347A1] An audio source (100) is amplified (102), filtered (104) and subsequently digitized (108) so that a Fourier transform may be performed by a digital signal processor (112). The frequency components of interest are then formed into histograms over a time period on the order of 5 minutes of speech sampled every 16 ms. The histogram and recognition of the audio source are performed by a computer (114) driven by an appropriately programmed algorithm.

IPC 1-7  
**G10L 5/06**

IPC 8 full level  
**G10L 17/00** (2006.01); **G10L 17/02** (2013.01); **G10L 17/04** (2013.01)

CPC (source: EP)  
**G10L 17/02** (2013.01); **G10L 17/04** (2013.01)

Citation (search report)

- [X] GB 2033637 A 19800521 - PHILIPS NV
- [X] US 3673331 A 19720627 - HAIR GEORGE D, et al
- [A] EP 0273615 A1 19880706 - BRITISH TELECOMM [GB]
- [X] SYSTEMS & COMPUTERS IN JAPAN, vol. 19, no. 6, June 1988, pages 63-71, Silver Spring, MD, US; K. SHIRAI et al.: "Speaker identification based on frequency distribution of vector-quantized spectra"
- [A] IEEE TRANSACTIONS ON ACOUSTICS, SPEECH AND SIGNAL PROCESSING, vol. ASSP-35, no. 2, February 1987, pages 133-143, New York, US; D.K. BURTON: "Text-dependent speaker verification using vector quantization source coding"
- [A] AT & T/TECHNICAL JOURNAL, vol. 66, no. 2, March-April 1987, pages 14-26, Short Hills, NJ, US; F.K. SOONG et al.: "A vector quantization approach to speaker recognition"
- [X] ICASSP'86 (IEEE-IECEJ-ASJ INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH AND SIGNAL PROCESSING, Tokyo, 7th - 11th April 1986), vol. 4, pages 2679-2682, IEEE, New York, US; O. WATANUKI et al.: "Speaker-independent isolated word recognition using label histograms"
- [A] IEEE TRANSACTIONS ON ACOUSTICS, SPEECH AND SIGNAL PROCESSING, vol. ASSP-33, no. 2, April 1985, pages 440-443, New York, US; D.K. BURTON et al.: "Speaker-dependent isolated word recognition using speaker-independent vector quantization codebooks augmented with speaker-specific data"
- [A] EUROPEAN CONFERENCE ON SPEECH TECHNOLOGY, Edinburgh, September 1987, vol. 2, pages 426-427, CEP Consultants, Edinburgh, GB; A. AKTAS et al.: "A selforganizing clustering technique for vector quantization in speech recognition"
- See references of WO 9102347A1

Designated contracting state (EPC)  
AT BE CH DE DK ES FR GB IT LI LU NL SE

DOCDB simple family (publication)  
**WO 9102347 A1 19910221**; CA 2063723 A1 19910129; EP 0484455 A1 19920513; EP 0484455 A4 19930310

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