

Title (en)  
DISTANCE MEASUREMENT CONTROL OF A MULTIPLE DETECTOR SYSTEM

Publication  
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Application  
**EP 88901684 A 19880111**

Priority  
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Abstract (en)  
[origin: WO8807740A1] Apparatus for detecting a fundamental frequency in speech utilizing a plurality of voiced detectors and selecting (104, 105) one of those detectors to make the voicing decision utilizing distance measurement values with each value generated by one of the voiced detectors. The voiced detector selected is the one which generated the best distance measurement value. The distance measurement value may be the Mahalanobis distance value or Hotelling's two-sample  $T_{<2>}$  statistic. Two types of voiced detectors are disclosed: statistical voiced detectors (103) and discriminant voiced detectors (107). The disclosed statistical voiced detector adapts to changing speech environments by detecting changes in the voice environment in response to classifiers that define certain attributes of the speech.

IPC 1-7  
**G10L 3/00**

IPC 8 full level  
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Citation (examination)  

- IEEE Transactions on Acoustics, Speech, and Signal Processing, volume ASSP-24, no. 3, June 1976, (New York, US), B.S. Atal et al.: "A pattern recognition approach to voiced-unvoiced-silence classification with applications to speech recognition", pages 201-212 see page 201, right-hand column, lines 14-26
- ICASSP 86 Proceedings, IEEE-IECEJ-ASJ International Conference on Acoustics, Speech, and Signal Processing, 7-11 April 1986, Tokyo, Japan, volume 1 of 4, IEEE, (New York, US), D.P. Prezas et al.: "Fast and accurate pitch detection using pattern recognition and adaptive time-domain analysis", pages 109-112 see pages 110, 111: "Final voicing and pitch"

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