Title (en)
Apparatus for automatic speech activity detection.

Title (de)
Einrichtung zum automatischen Feststellen einer Sprachsignalaktivität.

Title (fr)
Dispositif pour la détection automatique de l'activité d'un signal de parole.

Publication
EP 0143161 A1 19850605 (EN)

Application
EP 84107846 A 19840705

Priority
US 51206883 A 19830708

Abstract (en)
An apparatus and method for automatic detection of speech signals in the presence of noise including noise events occurring when speech is not present and having signals whose signal strengths are substantially equal to or greater than the speech signals. Frames of data representing digitized output signals from a plurality of frequency filters are operated on by a linear feature vector to create a scalar feature for each frame which is indicative of whether the frame is to be associated with speech signals or noise event signals. The scalar features are compared with a detection threshold value which is created and updated from a plurality of previously stored scalar features. A plurality of the results of the comparison for a succession of frames is stored and the stored results combined in a predetermined way to obtain an indication of when speech signals are present. In automatic speech recognizers employing the above-described speech detections, when such indication is given, frames are further preprocessed and then compared with stored templates in accordance with the dynamic programming algorithm in order to recognize which word was spoken.

IPC 1-7
G10K 15/04

IPC 8 full level
G10L 11/00 (2006.01); **G10L 11/02** (2006.01); **G10L 15/04** (2006.01); **G10L 15/20** (2006.01); **G10L 21/02** (2006.01)

CPC (source: EP)
G10L 25/78 (2013.01)

Citation (search report)
- [X] EP 0008551 A2 19800305 - THOMSON CSF [FR]
- [X] GB 2109205 A 19830525 - TOKYO SHIBAURA ELECTRIC CO
- [A] IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS, vol. IE-30, no. 2, May 1983, pages 150-155, IEEE, New York, USA; N. KISHI et al.: "A voice input system for automobiles using a microprocessor"

Cited by
GB2278984A; GB2422279A; CN108242236A

Designated contracting state (EPC)
AT DE FR GB

DOCDB simple family (publication)
EP 0143161 A1 19850605; CA 1218458 A 19870224; JP S6039695 A 19850301

DOCDB simple family (application)
EP 84107846 A 19840705; CA 458275 A 19840706; JP 14076284 A 19840709