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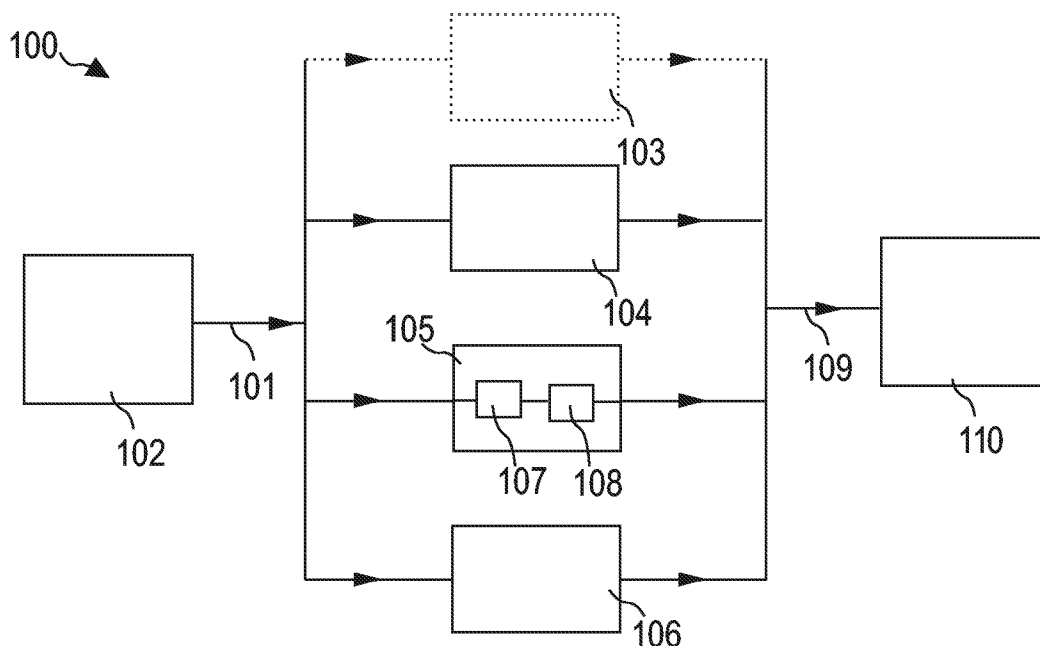
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(54) Title: A METHOD OF AND A DEVICE FOR PROCESSING AUDIO DATA, A PROGRAM ELEMENT AND A COMPUTER-READABLE MEDIUM



(57) Abstract: A device (100) for processing audio data (101), wherein the device (100) comprises a mid-frequency filter unit (105) adapted to selectively filter a mid-frequency range component of the audio data (101) in such a manner that amplitudes of different frequency sub components of the mid-frequency range component of the audio data (101) are scaled so that the scaled amplitudes reflect relations between the original amplitudes of the different frequency sub-components.

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INTERNATIONAL SEARCH REPORT

International application No

PCT/IB2006/051019

A. CLASSIFICATION OF SUBJECT MATTER
INV. H03G9/02

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
H03G

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 027 410 A (WILLIAMSON ET AL) 25 June 1991 (1991-06-25) column 7, line 65 - column 8, line 41; figures 2-5,7-12 column 8, line 51 - column 9, line 60 column 11, line 9 - column 12, line 41 column 13, line 16 - column 17, line 20 -----	1-13, 18-22
X A	US 4 701 953 A (WHITE ET AL) 20 October 1987 (1987-10-20) column 7, line 43 - column 8, line 5; figure 5 column 9, lines 9-23 column 9, line 67 - column 10, line 17 ----- -/--	1-4 5-13, 18-22

☒ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- * & * document member of the same patent family

Date of the actual completion of the international search

25 July 2006

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INTERNATIONAL SEARCH REPORT

International application No

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	US 4 508 940 A (STEEGER ET AL) 2 April 1985 (1985-04-02) column 6, lines 47-53; figure 1	1,10 2-9, 11-13, 18-22
X	----- US 4 454 609 A (KATES ET AL) 12 June 1984 (1984-06-12) figures 7,9	1
X	----- US 6 731 767 B1 (BLAMEY PETER JOHN ET AL) 4 May 2004 (2004-05-04) column 5, line 25 - column 6, line 42; figures 4A,4B column 9, line 67 - column 10, line 17	1
X A	----- US 4 185 168 A (CAUSEY, G DONALD ET AL) 22 January 1980 (1980-01-22) figure 4 -----	1 2-13, 18-22

INTERNATIONAL SEARCH REPORT

International application No.
PCT/IB2006/051019

Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

see annex

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-13,18-22

scaling in a device for processing audio data

2. claims: 14,15

cutting a low frequency range

3. claims: 16,17

conditioning a low frequency range

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/IB2006/051019

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