



(51) International Patent Classification:
G10L 11/00 (2006.01) *G10L 19/14* (2006.01)

(21) International Application Number:
PCT/EP2009/004339

(22) International Filing Date:
16 June 2009 (16.06.2009)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/079,875 11 July 2008 (11.07.2008) US

(71) Applicant (for all designated States except US):
FRAUNHOFER-GESELLSCHAFT FÖRDERUNG DER ANGEWANDTEN FORSCHUNG E.V. [DE/DE]; Hansastrasse 27c, 80686 München (DE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **FUCHS, Guillaume** [FR/DE]; Parkstrasse 12, 90409 Nürnberg (DE). **BAYER, Stefan** [DE/DE]; Dortmunder Str. 14, 90425 Nürnberg (DE). **NAGEL, Frederik** [DE/DE]; Wilhelmshavener Strasse 72, 90425 Nürnberg (DE). **HERRE, Jürgen** [DE/DE]; Hallerstr. 24, 91054 Buckenhof (DE). **REITELBACH, Nikolaus** [DE/DE]; Spessartstrasse 38, 90427 Nürnberg (DE). **WABNIK, Stefan** [DE/DE]; Fichtenweg 5, 98693 Ilmenau (DE). **YOKOTANI,**

Yoshikazu [JP/JP]; Kibune 336 -101, Hamamatsu, Shizuoka 434 - 0038 (JP). **HIRSCHFELD, Jens** [DE/DE]; Steinweg 32, 36266 Heringen (DE). **LECOMTE, Jérémie** [FR/DE]; Sulzbacher Strasse 39, 90489 Nürnberg (DE).

(74) Agents: **ZIMMERMANN, Tankred** et al.; Schoppe, Zimmermann, Stöckeler & Zinkler, postfach 246, 82043 Pullach bei München (DE).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: METHOD AND DISCRIMINATOR FOR CLASSIFYING DIFFERENT SEGMENTS OF A SIGNAL

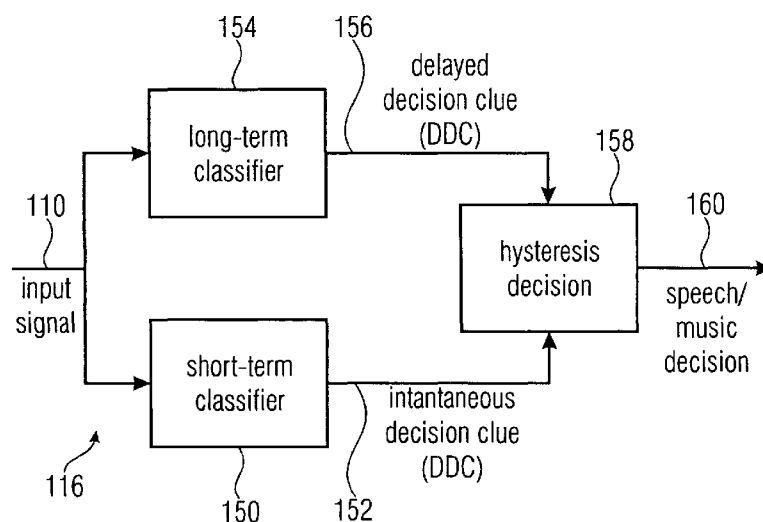


FIGURE 1

(57) Abstract: For classifying different segments of a signal which comprises segments of at least a first type and second type, e.g. audio and speech segments, the signal is short-term classified (150) on the basis of the at least one short-term feature extracted from the signal and a short-term classification result (152) is delivered. The signal is also long-term classified (154) on the basis of the at least one short-term feature and at least one long-term feature extracted from the signal and a long-term classification result (156) is delivered. The short-term classification result (152) and the long-term classification result (156) are combined (158) to provide an output signal (160) indicating whether a segment of the signal is of the first type or of the second type.





Published:

— *with international search report (Art. 21(3))*