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[Continued on next page]

(54) Title: SELF-MIXING REFLECTIVE SENSOR

(57) Abstract: The invention relates to a self-mixing reflective sensor, preferably VCSEL-based, which does not require a separate photodetector nor complicated signal-processing circuitry. The measurement principle is based on a detection of the self-mixing oscillation amplitude rather than the oscillation frequency of the self-mixing signal.

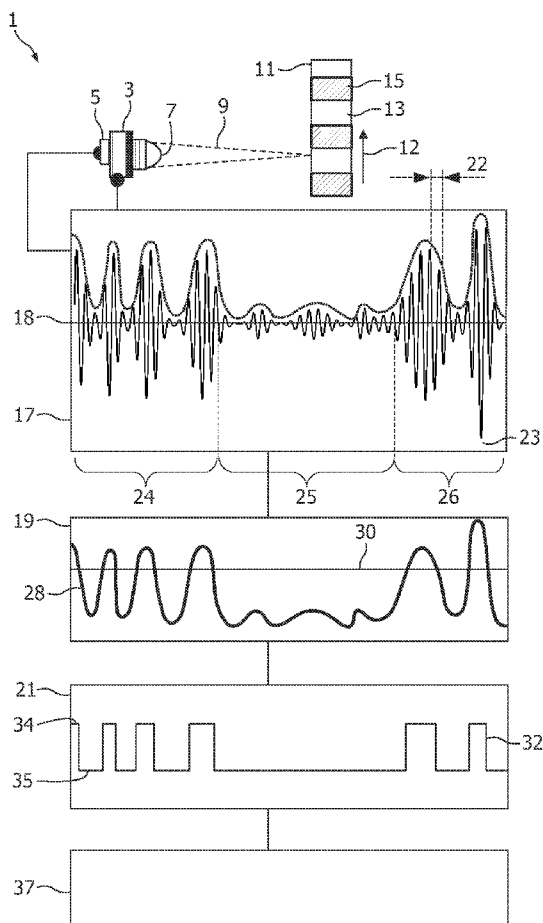


FIG. 1





(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, GD, 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.

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A. CLASSIFICATION OF SUBJECT MATTER

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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)

G06F G01P

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2007/102523 A1 (KONG YUAN [US]) 10 May 2007 (2007-05-10) paragraphs [0034], [0 37], [0 38] -----	1-14
A	US 2006/284743 A1 (KONG YUAN [US]) 21 December 2006 (2006-12-21) paragraph [0047] -----	1-14



Further documents are listed in the continuation of Box C.



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INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2007102523 A1	10-05-2007	NONE	
US 2006284743 A1	21-12-2006	NONE	