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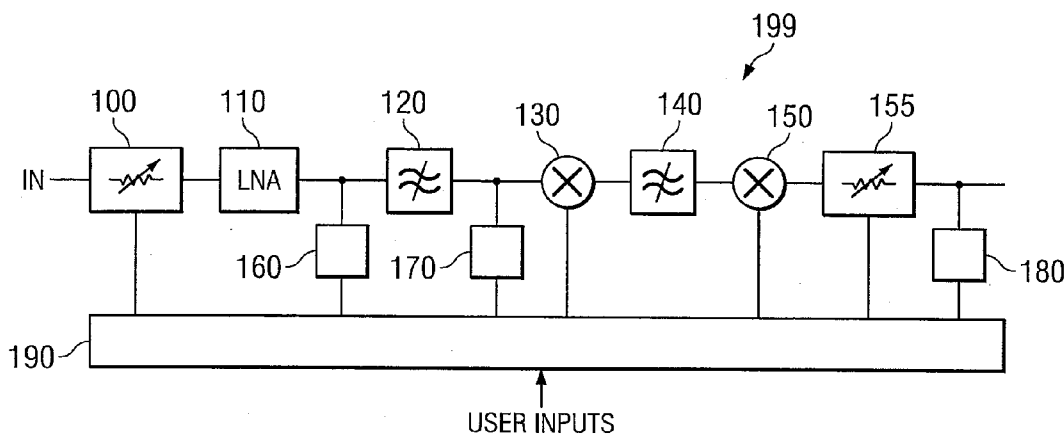
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10 April 2008

(54) Title: AGC SYSTEM AND METHOD FOR BROADBAND TUNERS



(57) Abstract: A system for providing automatic gain control (AGC) comprises a signal path with an RF input, a plurality of power detectors in communication with the signal path, each of the power detectors operable to measure a total broadband power level of a signal in the signal path, each of the power detectors positioned to monitor a point in the signal path corresponding to a change in signal bandwidth, a control system operable to receive from each of the power detectors information associated with the power level and to adjust attenuation in the signal path in response to the information to achieve desired gain control.

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INTERNATIONAL SEARCH REPORT

International application No

PCT/US2007/069427

A. CLASSIFICATION OF SUBJECT MATTER
INV. H03G3/30

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	GB 2 398 943 A (ZARLINK SEMICONDUCTOR LTD [GB]) 1 September 2004 (2004-09-01)	1-4, 10, 11, 18, 21-24
Y	page 1, lines 4-8 page 3, lines 8-18 page 6, lines 19-31 page 7, lines 16-21 page 8, lines 8-14 page 9, lines 24-33	5, 6, 14, 20
X	WO 2004/077492 A (INFINEON TECHNOLOGIES AG [DE]; FISCHER FRANK [DE]; KLEIN HORST [DE]; K) 10 September 2004 (2004-09-10) page 8, lines 5-18; figure 1 ----- -/-	1-4, 10, 18, 23

☒ 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

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"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

21 November 2007

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19/02/2008

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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.
Y	US 6 181 201 B1 (BLACK PETER J [US]) 30 January 2001 (2001-01-30) column 7, line 55 - column 8, line 25; figures 5,8B,9B -----	5,6,14, 20
X	US 2005/179820 A1 (INA NORIHISA [US] ET AL) 18 August 2005 (2005-08-18) figures 1-3 -----	1-4,10, 18,23
A	EP 0 969 595 A (NOKIA TECHNOLOGY GMBH [DE]) 5 January 2000 (2000-01-05) figures 1-3 -----	5,6,20

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2007/069427

Box No. 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 No. 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 allsearchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search reportcovers 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 and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☐ 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: 1-6,10,11,14,18,20-22,23-24

take over points

2. claims: 7,8

bank of comparators

3. claims: 9,12,13,15-17

clock and countersystem

4. claim: 19

discrete resistive legs

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2007/069427

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