



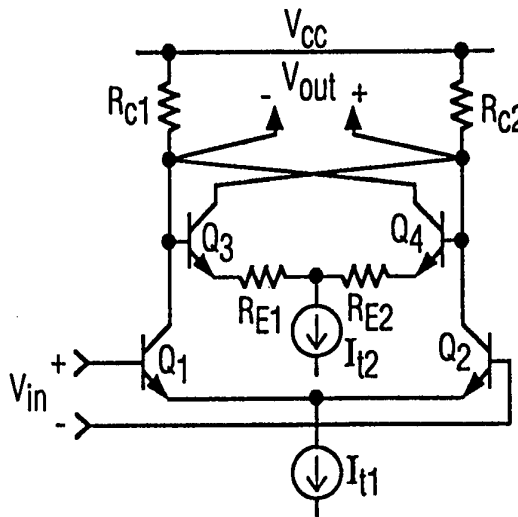
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<p>(21) International Application Number: PCT/IB96/00429 (22) International Filing Date: 9 May 1996 (09.05.96) (30) Priority Data: 08/453,408 30 May 1995 (30.05.95) US (71) Applicant: PHILIPS ELECTRONICS N.V. [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL). (71) Applicant (for SE only): PHILIPS NORDEN AB [SE/SE]; Kottbygatan 7, Kista, S-164 85 Stockholm (SE). (72) Inventors: PERSICO, Charles, J.; 1063 Morse Avenue #18-203, Sunnyvale, CA 94089 (US). NAVID, Nasrollah, Saeed, Navid; 13692 Quito Road, Saratoga, CA 95070 (US). FOTOWAT-AHMADY, Ali, Fotowat-Ahmady; 1014 West Olive #1, Sunnyvale, CA 94089 (US). (74) Agent: MAK, Theodorus, N.; Internationaal Octrooibureau B.V., P.O. Box 220, NL-5600 AE Eindhoven (NL).</p>	<p>(81) Designated States: CN, JP, KR, European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i> (88) Date of publication of the international search report: 6 February 1997 (06.02.97)</p>	

(54) Title: IF AMPLIFIERS/LIMITERS

(57) Abstract

An IF limiting amplifier uses localized positive feedback in each amplifier stage to provide additional small signal gain while maintaining the limiting gain. The extra small signal gain results in higher overall sensitivity for the receiver at less bias current. The reduction in the number of stages needed to perform the same signal response results in a significant decrease in power consumption by the circuit.



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INTERNATIONAL SEARCH REPORT

International application No.
PCT/IB 96/00429

A. CLASSIFICATION OF SUBJECT MATTER		
IPC6: H03F 3/45, H03F 1/38 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)		
IPC6: H03F		
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EDOC		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4904952 A (HIROSHI TANIMOTO), 27 February 1990 (27.02.90)	1-4,6,8-10
A	--	5,7
X	US 5296761 A (ALI FOTOWAT-AHMADY ET AL), 22 March 1994 (22.03.94)	1-4,6,8-10
A	--	5,7
A	US 4322688 A (KENNETH G. SCHLOTZHAUER ET AL), 30 March 1982 (30.03.82)	1-10

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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
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