

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
27 February 2003 (27.02.2003)

PCT

(10) International Publication Number
WO 03/017475 A1

(51) International Patent Classification⁷: **H03F 3/68**

(21) International Application Number: PCT/US02/25799

(22) International Filing Date: 15 August 2002 (15.08.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/312,086 15 August 2001 (15.08.2001) US
60/363,545 13 March 2002 (13.03.2002) US
Not furnished 8 August 2002 (08.08.2002) US
Not furnished 8 August 2002 (08.08.2002) US
Not furnished 8 August 2002 (08.08.2002) US
Not furnished 8 August 2002 (08.08.2002) US

CA 92618 (US). **BURNS, Lawrence, M.**; 267062 Talega Avenue, Laguna Hills, CA 92653 (US). **MCMULLIN, Donald**; 17 Helianthus, Rancho Santa Margarita, CA 92688 (US).

(74) Agents: **SOKOHL, Robert** et al.; Sterne, Kessler, Goldstein & Fox P.L.L.C., Suite 600, 1100 New York Avenue N.W., Washington, DC 20005-3934 (US).

(84) Designated States (*regional*): European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR).

Published:

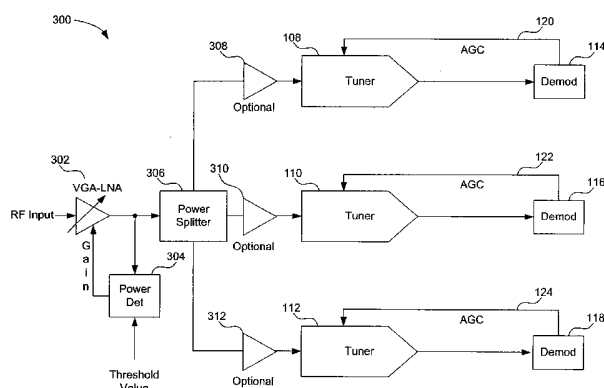
- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(71) Applicant: **BROADCOM CORPORATION** [US/US];
16215 Alton Parkway, Irvine, CA 92618-361 (US).

(72) Inventors: **FANOUS, Adel**; 15 Bellezza, Irvine, CA 92620 (US). **DAUPHINEE, Leonard**; 34 Japonica, Irvine,

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD AND SYSTEM FOR MULTIPLE TUNER APPLICATION USING A LOW NOISE BROADBAND DISTRIBUTION AMPLIFIER



(57) Abstract: An active splitter circuit arrangement (300) includes a first amplification module (302) having a number of first input ports and first output ports. The first amplification module is configured to provide first stage amplification to a received input signal (RF input) and produce from the amplified input signal a number of output signals, each substantially matching the input signal. (RF input). Also included is a first gain control device (304) having a number of gain input ports respectively coupled to the first output ports and a gain output port coupled to at least one of the first input ports. The first gain control device is configured to control a gain of the first amplification module. Next, a number of second amplification modules (308, 310, 312) corresponding to the number of output signals has a number of second input ports respectively coupled to the first output ports. Each second amplification module (308, 310, 312) is configured to receive a control signal from the second gain control device.

