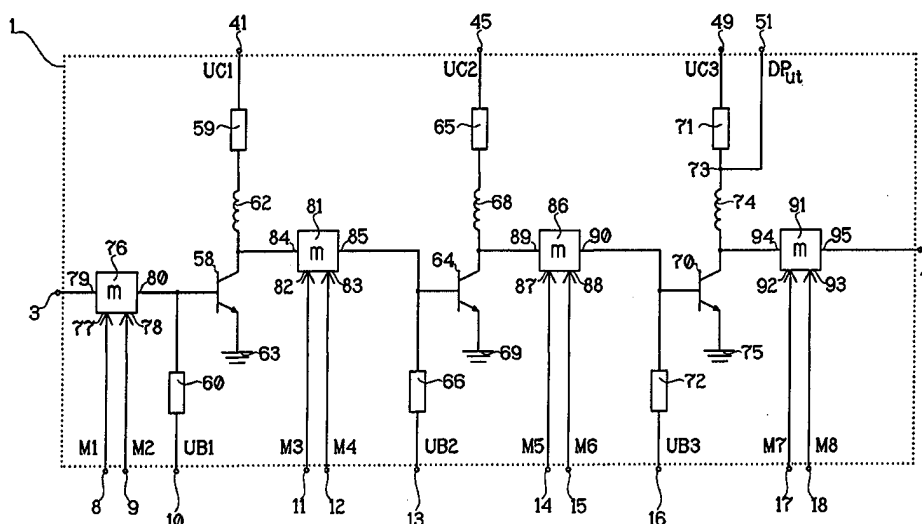




## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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<b>(21) International Application Number:</b> PCT/SE98/00617 <b>(22) International Filing Date:</b> 3 April 1998 (03.04.98) <b>(30) Priority Data:</b> 9701452-6 18 April 1997 (18.04.97) SE <b>(71) Applicant:</b> TELEFONAKTIEBOLAGET LM ERICSSON (publ) [SE/SE]; S-126 25 Stockholm (SE). <b>(72) Inventors:</b> CARLSSON, Torsten; Viborgsslingan 46, S-224 42 Lund (SE). HANSSON, Thomas; Gunnesbovägen 75, S-226 54 Lund (SE). <b>(74) Agent:</b> ERICSSON MOBILE COMMUNICATIONS AB; Patent Unit, S-164 80 Stockholm (SE).		<b>(81) Designated States:</b> AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).  <b>Published</b> <i>With international search report. Before the expiration of the time limit for amending the claim. and to be republished in the event of the receipt of amendments.</i>  <b>(88) Date of publication of the international search report:</b> 21 January 1999 (21.01.99)

## (54) Title: AN ARRANGEMENT AND METHOD RELATING TO SIGNAL POWER AMPLIFICATION



## (57) Abstract

The present invention relates to arrangements and procedures in the power amplification of a signal. The power of an input signal is amplified and the power-amplified input signal forms an output signal whose power shall be in agreement with a reference level. The power of the signal is amplified with a power amplification circuit (5) that includes a power amplifier (1) and a control unit (2). The power amplification circuit (5) also includes means for measuring the power of the output signal. The control unit (2) generates supply voltages for the transistors (58, 64, 70) of the power amplifier (1) in relation to said reference level, so as to obtain a power amplifier (1) of good efficiency. The control unit (2) regulates the power of the output signal in relation to the reference level and in relation to the power of the output signal, so that the power of the output signal will be in general agreement with said reference level. The power amplifier (1) may also include controllable matching circuits that are controlled by controlled signals generated in relation to said reference level, so as to further improve the efficiency of the power amplifier (2).

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## INTERNATIONAL SEARCH REPORT

International application No.

PCT/SE 98/00617

## A. CLASSIFICATION OF SUBJECT MATTER

IPC6: H03G 3/20, H03F 3/24

According to International Patent Classification (IPC) or to both national classification and IPC

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Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

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WPIL, EDOC

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X	EP 0481741 A2 (HITACHI, LTD.), 22 April 1992 (22.04.92), column 6, line 55 - column 7, line 51; column 10, line 18 - line 27; column 11, line 48 - line 55, figures 1,4,6,9-11, column 13, line 49 - column 14, line 44; column 14, line 9 - line 44	1,14,15-21
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International application No.

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