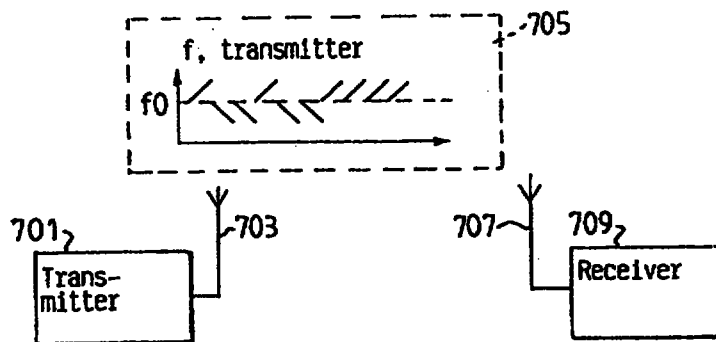




## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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| <b>(21) International Application Number:</b> PCT/SE97/01283<br><b>(22) International Filing Date:</b> 15 July 1997 (15.07.97)<br><b>(30) Priority Data:</b><br>9602916-0      2 August 1996 (02.08.96)      SE<br><b>(71) Applicant:</b> TELEFONAKTIEBOLAGET LM ERICSSON<br>[SE/SE]; S-126 25 Stockholm (SE).<br><b>(72) Inventor:</b> WINNBERG, Jan-Olov; Långa Berget 1, S-428 37<br>Källered (SE).<br><b>(74) Agents:</b> LARFELDT, Helene et al.; Bergenstråhle & Lindvall<br>AB, P.O. Box 17704, S-118 93 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, HU, 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, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, 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).<br><br><b>Published</b><br><i>With international search report.<br/>         Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i> |                                                                                                                                             |

**(54) Title:** A METHOD AND A DEVICE FOR BROADBAND TRANSMISSION

**(57) Abstract**

In a method and a system for transmission of information, broad band frequency sweeps are used. A certain sweep then denotes a certain symbol. In a preferred embodiment, the frequencies between which the sweeps occur are varied according to a pseudo-random scheme. Furthermore, a receiver for efficient detection of such broad band sweeps comprises reference oscillators in different receiving channels. The system has very good performance in terms of data rate, time delay, use of a large channel bandwidth, low probability of detection and low risk of tapping and good noise immunity.