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(71) Applicant *(for all designated States except US)*: **TELEFONAKTIEBOLAGET LM ERICSSON (publ)** [SE/SE]; S-164 83 Stockholm (SE).

(72) Inventor; and

(75) Inventor/Applicant *(for US only)*: **DENT, Paul, W.** [GB/US]; 637 Eagle Point Road, Pittsboro, NC 27312 (US).

(74) Agents: **BETHEA, Thomas** et al.; Ericsson Inc., 6300 Legacy, MS EVR 1-C-11, Plano, TX 75024 (US).

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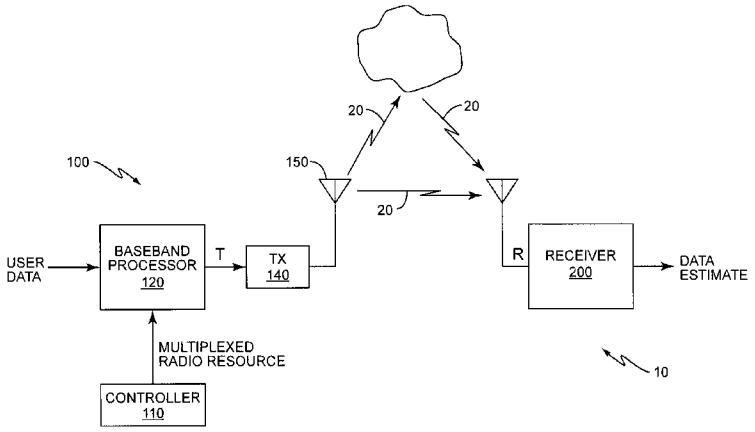


FIG. 1

(57) Abstract: A method and apparatus for using the same multiplexed radio resource to simultaneously transmit a pilot sequence and an information signal is described herein. After traveling through a multi-path propagation channel (20), a receiver (200) receives the transmitted pilot and information signals, correlates the received signal (R) with the known pilot sequence to determine one or more correlation values, and estimates the multi- path propagation channel based on the correlation values. The receiver uses the channel estimates to process the received signal to remove the pilot sequence from the information signal. By using the same multiplexed radio resource to transmit both the pilot sequence and the user information signal, the present invention enables more radio resources to be allocated to the information signal without compromising pilot- based channel estimation, and provides more regular access to the transmitted pilot sequence at the receiver.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
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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)
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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, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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X	WO 2007/008036 A2 (LG ELECTRONICS INC [KR]; IHM BIN CHUL [KR]; LEE MOON IL [KR]; CHUN JIN) 18 January 2007 (2007-01-18) * abstract page 19, line 6 - page 23, line 10; figure 8 page 78, line 23 - page 86, line 19; figures 21,22	1-53
X	LI Y ET AL: "Channel estimation and interference cancellation in CP-CDMA systems" 20070201, vol. 1, no. 1, 1 February 2007 (2007-02-01), pages 106-112, XP006028089 sections 1-4 figures 1-3	1-53

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[X] Further documents are listed in the continuation of Box C.

[X] See patent family annex.

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European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Nilsson, Martin

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

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X	US 2004/228267 A1 (AGRAWAL AVNEESH [US] ET AL) 18 November 2004 (2004-11-18)	1,15,29, 42
A	paragraph [0012] - paragraph [0016] paragraph [0033] - paragraph [0054] paragraph [0072] - paragraph [0074] paragraph [0083] - paragraph [0086] paragraph [0089]	2-14, 16-28, 30-41, 43-53

X	BUDIANU C ET AL: "Channel estimation for space-time orthogonal block codes" ICC 2001. 2001 IEEE INTERNATIONAL CONFERENCE ON COMMUNICATIONS. CONFERENCE RECORD. HELSINKY, FINLAND, JUNE 11 - 14, 2001; [IEEE INTERNATIONAL CONFERENCE ON COMMUNICATIONS], NEW YORK, NY : IEEE, US LNKD- DOI:10.1109/ICC.2001.936836, vol. 4, 11 June 2001 (2001-06-11), pages 1127-1131, XP010553504 ISBN: 978-0-7803-7097-5	1,15,29, 42
A	section 1-3, figure 2	2-14, 16-28, 30-41, 43-53

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
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