(19) **United States**

(12) **Patent Application Publication**   (10) Pub. No.: **US 2003/0185159 A1**

Seo et al.   (43) Pub. Date: **Oct. 2, 2003**

(54) **APPARATUS AND METHOD FOR DETERMINING PILOT SIGNAL FIELD POSITION INFORMATION FOR UPLINK POWER CONTROL IN AN HSDPA MOBILE COMMUNICATION SYSTEM**

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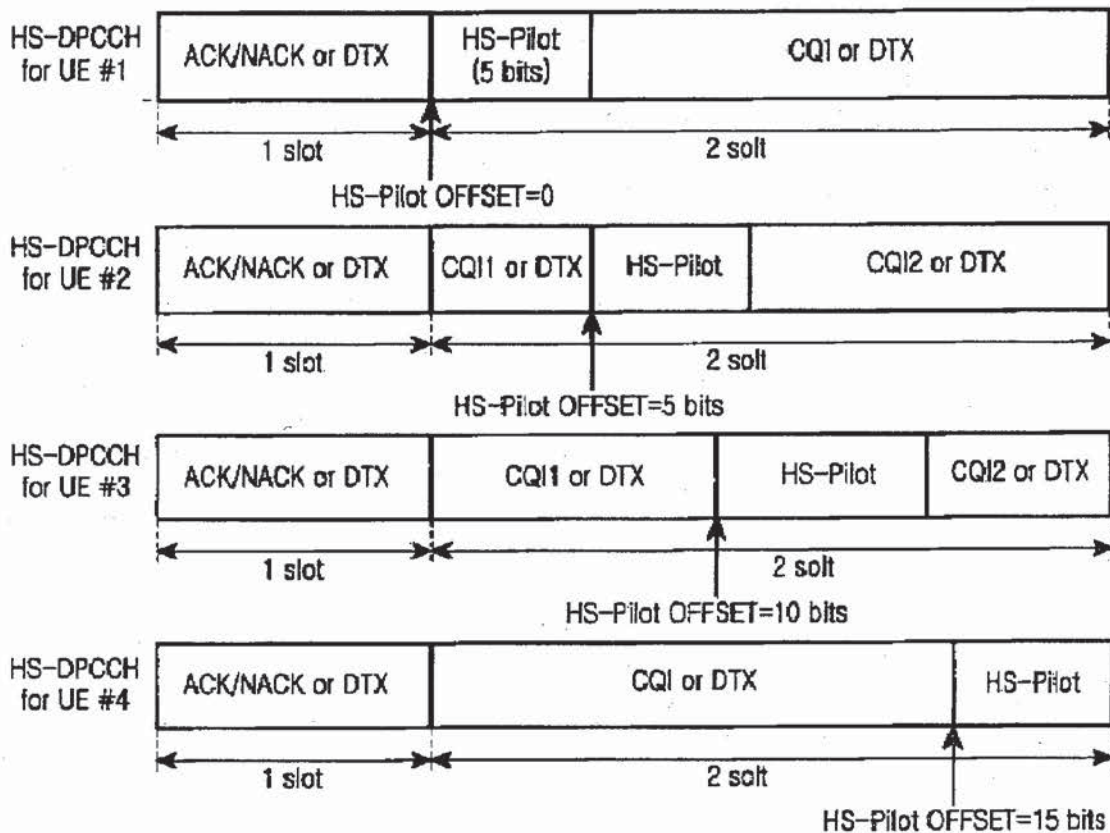**333 Earle Ovington Blvd.**
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(21) Appl. No.:   **10/395,619**

(22) Filed: **Mar. 24, 2003**

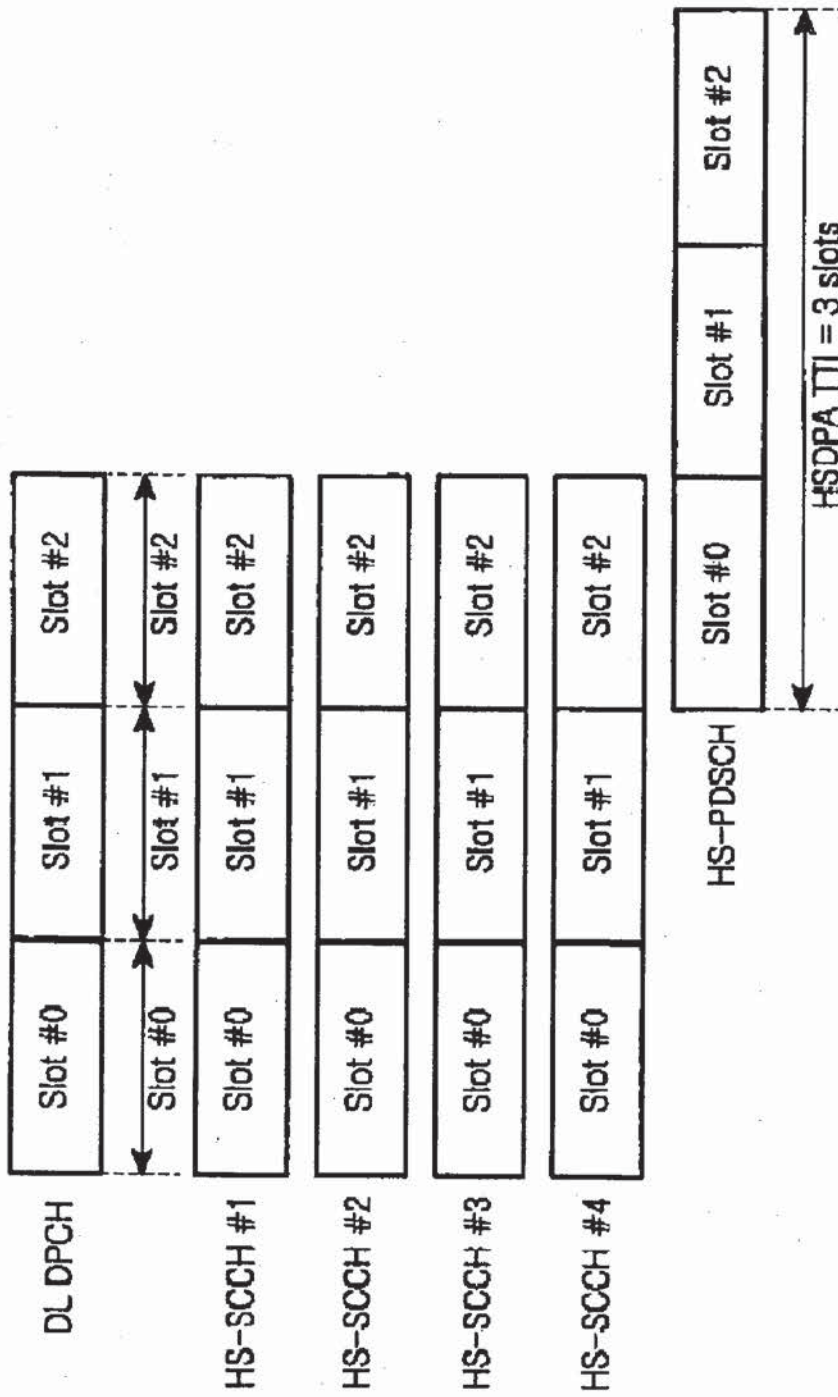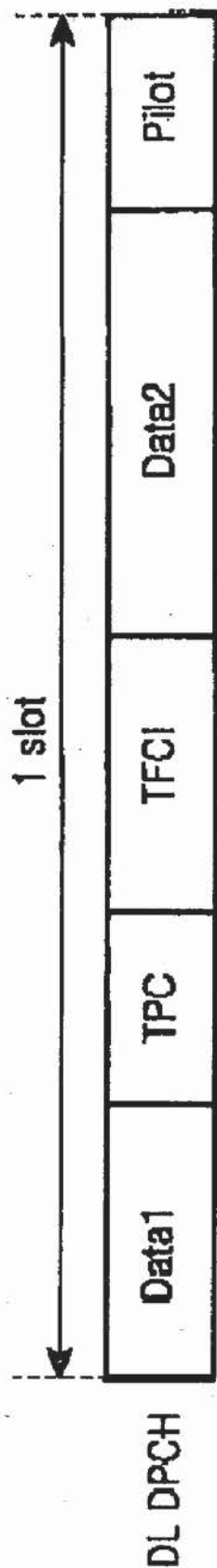(30)   **Foreign Application Priority Data**

Mar. 23, 2002   (KR) 15918/2002

Publication Classification

(51) Int. Cl.^{7} H04B 7/005
(52) U.S. Cl. 370/278; 370/345

(57)   **ABSTRACT**

A mobile communication system transmits a control channel having an ACK/NACK information field indicating whether packet data is received at the Node B from the particular UE when the particular UE moves from the Node B to the handover region shared by the Node B and the neighbor Node B during reception of high speed packet data from the Node B, a channel quality information (CQI) field indicating a condition of a channel over which the high speed packet data is transmitted, and a pilot signal field for power control. A radio network controller (RNC), connected to the Node and the neighbor Node B, identifies a plurality of UEs including the particular UE and other UEs, all of which are located in the handover region and receive the high speed packet data, and transmits pilot signal field position information to the UEs so that pilot signal fields that must be transmitted by the particular UE and the other UEs should not overlap with one another in the CQI field. The particular UE includes a pilot signal in a control channel at a position based on its own pilot signal field position information, and transmits the control channel.

FIG.1
(PRIOR ART)

DL DPCH

| Data1 | TPC | TFCI | Data2 | Pilot |

1 slot

FIG.2
(PRIOR ART)

FIG.3
(PRIOR ART)

401

Cell #1 (Primary)

403

Cell #2

UL_DPDCH+UL_DPCCH
+HS_DPCCH

UL_DPDCH+
UL_DPCCH

DL_DPCH
+HS-SCCH
+HS-PDSCH

DL_DPCH

UE

411

FIG.4
(PRIOR ART)

DOCKET ALARM
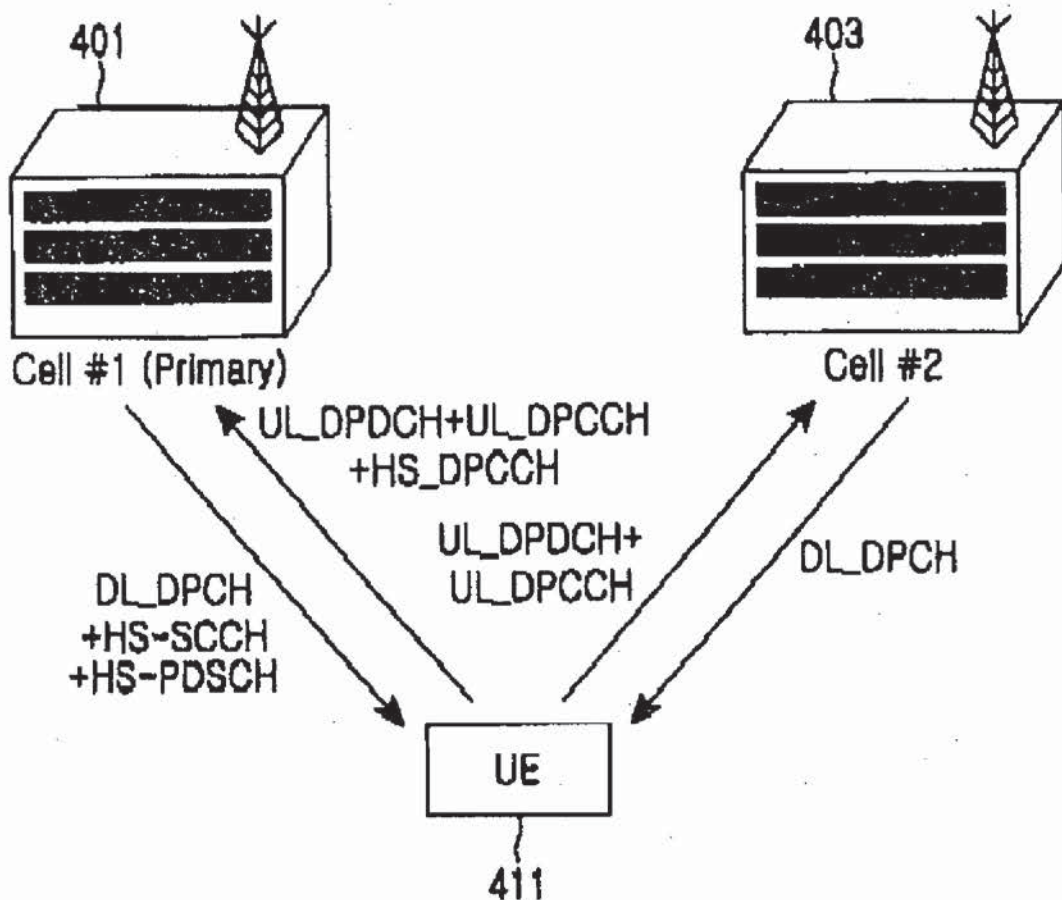
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