

Title (en)
MANAGEMENT OF TIME SLOT OPERATIONS FOR WIRELESS COMMUNICATION

Title (de)
VERWALTUNG VON ZEITSCHLITZOPERATIONEN FÜR DRAHTLOSE KOMMUNIKATION

Title (fr)
GESTION D'OPERATIONS EN CRENEAUX POUR COMMUNICATION SANS FIL

Publication
EP 1116352 A4 20030917 (EN)

Application
EP 99951410 A 19990908

Priority
• US 9920587 W 19990908
• US 15973498 A 19980924

Abstract (en)
[origin: WO0018052A1] A user station includes a control system for managing time slot operations for a system using aspects of TDMA/TDD and FDMA/FDD, to allow the user station to communicate periodically with a base station. The control system comprises an over-the-air driver for interfacing with upper layer protocol functions, and a slot manager for interfacing with the hardware to handle slot-related functions. The slot manager maintains a list or queue of slot objects, each defining a group of one or more time slots forming a logical communication channel. The slot manager configures the hardware to process each time slot at the appropriate time within a time frame. Different slot objects may be created for voice, signalling or other data traffic, and each slot object may cause the user station to communicate with the base station in one or more time slots of the time frame. The over-the-air driver instructs the slot manager to add, modify or delete slot objects based on requests from upper layer protocol functions. The control system may include service routines for performing data transfers in response to interrupts generated by a hardware controller (such as a control ASIC). The user station hardware may include a set of direct access data channels controlled through the use of interrupts to a peripheral event controller (PEC). The user station control system may also comprise components for radio reconfiguration, ARQ processing and power control processing.

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Citation (search report)
• [X] US 5805581 A 19980908 - UCHIDA YOSHINORI [JP], et al
• [X] WO 9713353 A1 19970410 - OMNIPOINT CORP [US], et al
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• [X] US 5063498 A 19911105 - HIRAHARA ZIRO [JP], et al
• [X] US 4716523 A 19871229 - BURRUS JR GILBERT S [US], et al
• See also references of WO 0018052A1

Designated contracting state (EPC)
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