

Title (en)  
DISTRIBUTED RADIO SYSTEM WITH MULTIPLE TRANSCEIVERS FOR SIMULCASTING AND SELECTIVE PROCESSING OF RECEIVED SIGNALS

Title (de)  
VERTEILTES FUNKSYSTEM MIT MEHREREN SENDERN/EMPFÄNGERN ZUM SIMULCASTING UND SELEKTIVEN VERARBEITEN EMPFANGENER SIGNALE

Title (fr)  
SYSTEME RADIO REPARTI COMPORTANT DE MULTIPLES EMETTEURS/RECEPTEURS DE DIFFUSION SIMULTANEE ET DE TRAITEMENT SELECTIF DE SIGNAUX RE US

Publication  
**EP 1479182 A1 20041124 (EN)**

Application  
**EP 03713713 A 20030224**

Priority  
• US 0305884 W 20030224  
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Abstract (en)  
[origin: CN1640034B] A distributed radio system with multiple transceivers for simulcasting and selective processing of received signals is provided. The distributed radio system includes a plurality of processing elements and radio frequency transmitter elements interconnected by an Ethernet network. The system designates a number of radio frequency transmitter elements to be elements of a radio frequency simulcast set. The system utilizes relatively few frequency channels, and transmits at very low power levels, and thus causes minimal interference with an existing macrocellular environment. When signals transmitted from a mobile unit are detected by multiple radio receivers, the system is able to select a desired radio receiver signal for processing. When selecting a received signal for processing, the system utilizes a distributed processing technique that performs the selection process throughout several levels. The distributed processing utilized by the selection process may be synchronized. A selection time window may be utilized for making the selection process for the upstream-received data traffic. The system utilizes a centralized data link layer. Transmissions are implemented by a two-level multicast technique. The data transmission traffic is bundled. Selective management of the Ethernet switches is performed by the system.

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IPC 8 full level  
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