

Title (en)
DIVERSITY SYSTEM AND METHOD IN A SATELLITE TELECOMMUNICATION NETWORK

Title (de)
DIVERSITY VERFAHREN UND GERÄT IN EINEM SATELLITENKOMMUNIKATIONSNETZ

Title (fr)
PROCEDE POUR SYSTEME EN DIVERSITE DANS UN RESEAU SATELLITAIRE DE TELECOMMUNICATIONS

Publication
EP 1250769 A1 20021023 (EN)

Application
EP 01906597 A 20010118

Priority
• US 0101772 W 20010118
• US 48820100 A 20000119

Abstract (en)
[origin: WO0154314A1] A single uplink signal burst from a user terminal in an uplink region of a satellite radiotelephone system is received during an uplink signal frame at two or more visible satellites in the uplink region. The single received signal burst from the user terminal that is received at the two or more satellites then is diversity combined. The two or more satellites preferably receive a single uplink signal burst from a plurality of, and preferably all of, the user terminals in the uplink region without time overlap, so that diversity combining may be performed. Most preferably, all of the satellites receive signal bursts from all of the user terminals in the uplink region during the uplink signal frame, without time overlap, so that return link diversity combining using all of the visible satellites may be obtained. In order to allow reception by two or more visible satellites in the return link, of signal bursts from multiple user terminals in the uplink region, a guard time is established between adjacent uplink signal bursts that are transmitted from the user terminals in the uplink region. The guard time is based upon a time of arrival difference for the adjacent uplink signal bursts to one of the satellites, for example having lowest elevation angle or at the horizon. Fixed or variable guard times may be provided between adjacent uplink signal bursts that are transmitted from user terminals in the uplink region. Thus, the satellite radiotelephone system preferably can utilize all of the transmitted signals from the user terminals, to allow improved reception by the satellite and/or reduced power consumption by the user terminals.

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IPC 8 full level
H04B 7/185 (2006.01); **H04B 7/212** (2006.01)

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Citation (search report)
See references of WO 0154314A1

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