

Title (en)  
SATELLITE COMMUNICATION METHOD AND APPARATUS

Title (de)  
VERFAHREN UND EINRICHTUNG ZUR SATELLITENKOMMUNIKATION

Title (fr)  
PROCEDE ET DISPOSITIF DE COMMUNICATION PAR SATELLITE

Publication  
**EP 1013005 A2 20000628 (EN)**

Application  
**EP 99922346 A 19990518**

Priority  
• GB 9901573 W 19990518  
• GB 9810883 A 19980520

Abstract (en)  
[origin: GB2337667A] A satellite messaging system has at least one earth station 2 which sends messages to mobile terminals 6 either on a TDM channel T or a to-mobile messaging channel MF dependent on the length of the message. Messages are formatted into a variable number of frames each containing a variable but equal number of data packets, to make maximum use of frame capacity. Messages and signalling information are transmitted by the mobile terminals 6 on a signalling channel S in frames comprising long and short slots, the division between such slots controlled by the earth station 2. The mobile terminals 6 may operate in either an earth station registered mode, in which they tune to the earth station TDM channel T when idle, or a network registered mode in which they tune to a network station TDM channel NT when idle. The earth station may operate in a standard traffic mode, in a low traffic mode, in which the network station TDM channel NT and signalling channel NS replace the earth station channels T and S, or in a high traffic mode in which the earth station transmits multiple TDM channels. The channel spacing between frequency channels used by mobile terminals referenced to the same earth station TDM channel is narrower than that between channels used by mobile terminals referenced to different TDM channels. The earth station transmits using a BPSK modulation scheme while the mobile terminals transmit using a  $\pi/2$  BPSK scheme. The earth station stores lists of addresses which are indexed using a short-form addressing scheme, and can be modified by the mobile terminals. The mobile terminals can request entry into a sleep mode.

IPC 1-7  
**H04B 7/185**

IPC 8 full level  
**H04W 28/00** (2009.01); **H04B 7/15** (2006.01); **H04B 7/185** (2006.01); **H04B 7/212** (2006.01); **H04W 4/14** (2009.01); **H04W 28/06** (2009.01); **H04W 72/04** (2009.01); **H04W 74/08** (2009.01); **H04W 84/06** (2009.01)

CPC (source: EP)  
**H04B 7/18532** (2013.01); **H04B 7/212** (2013.01); **H04B 7/18545** (2013.01)

Citation (search report)  
See references of WO 9960810A2

Cited by  
CN109495159A

Designated contracting state (EPC)  
DE DK FR GB NL

DOCDB simple family (publication)  
**GB 2337667 A 19991124**; **GB 2337667 A8 19991216**; **GB 2337667 B 20030604**; **GB 9810883 D0 19980722**; AU 3944899 A 19991206; CA 2293364 A1 19991125; EP 1013005 A2 20000628; EP 1429474 A2 20040616; EP 1429474 A3 20040908; JP 2002516551 A 20020604; WO 9960810 A2 19991125; WO 9960810 A3 19991229

DOCDB simple family (application)  
**GB 9810883 A 19980520**; AU 3944899 A 19990518; CA 2293364 A 19990518; EP 04000663 A 19990518; EP 99922346 A 19990518; GB 9901573 W 19990518; JP 2000550295 A 19990518