Title (en)
METHOD AND ARRANGEMENT FOR DIGITAL TRANSMISSION USING AM EMITTERS

Title (de)
VERFAHREN UND ANORDNUNG FÜR DIGITALE ÜBERTRAGUNG MIT AM-SENDERN

Title (fr)
PROCEDE ET DISPOSITIF PERMETTANT LA TRANSMISSION NUMERIQUE AU MOYEN D'EMETTEURS AM

Publication
EP 1413075 A2 20040428 (DE)

Application
EP 02727296 A 20020410

Priority
• DE 0201314 W 20020410
• DE 10127571 A 20010530

Abstract (en)
[origin: WO02098028A2] During digital transmission using existing non-linear AM emitters, spurious emissions occur as a result of the non-linear distortions, in turn causing inner band disturbances and also disturbing adjacent channels, as out-of-band radiation. Non-linear distortions are especially critical for digital multiple carrier signals (e.g. OFDM) which are recommended by the ITU with the DRM system for the AM area. In order to avoid the non-linear distortions, the end step of the AM emitter is operated in the linear mode, thus ensuring the ITU spectrum mask. The relatively low efficiency of the emitter during the linear operation can be improved by tracking the distribution voltage of the emitter end step according to the drive. To this end, the envelope of the complex modulated data signal is scanned, and said signal controls the distribution voltage for the emitter end step by means of the modulator operating as a switched-mode power supply unit.

IPC 1-7
H04H 1/00

IPC 8 full level
H04B 1/04 (2006.01); **H04H 20/49** (2008.01)

CPC (source: EP US)
H04H 20/49 (2013.01 - EP US)

Citation (search report)
See references of WO 02098028A2

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)
WO 02098028 A2 20021205; **WO 02098028 A3 20030724**; AT E450941 T1 20091215; AU 2002257556 A1 20021209; CN 100391132 C 20080528; CN 1463511 A 20031224; DE 10127571 A1 20021205; DE 50214048 D1 20100114; EP 1413075 A2 20040428; EP 1413075 B1 20091202; ES 2337450 T3 20100426; JP 2004519977 A 20040702; JP 2008182766 A 20080807; JP 4164023 B2 20081008; US 2003148743 A1 20030807; US 7406131 B2 20080729

DOCDB simple family (application)
DE 0201314 W 20020410; AT 02727296 T 20020410; AU 2002257556 A 20020410; CN 02801878 A 20020410; DE 10127571 A 20010530; DE 50214048 T 20020410; EP 02727296 A 20020410; ES 02727296 T 20020410; JP 2003501100 A 20020410; JP 2008096812 A 20080403; US 34335603 A 20030129