

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**

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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.

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