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**INDUSTRY STANDARD OF THE
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GY/T 220.1-2006

**Mobile Multimedia Broadcasting - Part 1: Framing Structure,
Channel Coding and Modulation for Broadcasting Channel
(English Translation)**

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Foreword

This standard is Part 1 of the GY/T 220 mobile multimedia broadcasting standard series.

Appendices A, B, C, and D of this standard are normative appendices.

Appendix E of this standard is an informative appendix.

This standard is under the jurisdiction of the National Radio and Television Standardization Technical Committee.

This standard was drafted. State Administration of Radio, Film and Television, Academy of Broadcasting Science, Beijing Taimei Century Technology Co., Ltd.

Introduction

The issuer of this standard draws attention to the following facts. When users declare compliance with this standard, they may use Related granted and pending patents.

The issuing body of this standard does not provide any opinions on the scope, validity and verification information of patents.

The patent holder has assured the issuing authority of this standard that it is willing to cooperate with any applicant on reasonable and non-discriminatory terms and conditions.

Negotiate with authorization. The patent holder's statement has been submitted to the issuer of this standard.

The following table lists the patentee's information.

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Mobile multimedia broadcasting. Part 1. Broadcast channel frame structure, channel coding and modulation

1 Scope

This standard specifies the frame structure of the signal transmitted by the broadcast channel of the mobile multimedia broadcast system in the frequency range of 30MHz to 3000MHz, Channel coding and modulation.

This standard applies to the transmission of television, radio, and data signals through satellite and/or terrestrial wireless in the frequency range of 30MHz to 3000MHz Broadcasting system for multimedia signals such as information.

2 Normative references

The clauses in the following documents have become the clauses of this standard after being referenced. For dated references, all subsequent Neither amendments (excluding errata) or revised versions are applicable to this standard, however, parties who have reached an agreement under this standard are encouraged to study is the latest version of these files available? For undated references, the latest version applies to this standard.

GB/T 7400.2 Radio and television terminology radio broadcasting GB/T 7400.11 Digital TV Terminology

3.1 Terms and definitions

The following terms and definitions apply to this standard.

3.1.1

Guard interval

Sends a transition signal between symbols for smoothing between symbols.

3.1.2

Pilot pilot

A part of the subcarriers at a specific position in the OFDM symbol is used to transmit a signal demodulated by an auxiliary terminal.

3.1.3

Transmitter identifier signal A signal at the beginning of each time slot in the physical layer signal frame, used to distinguish between different transmitters.

3.1.4

Constellation mapping the process of mapping the symbols to be transmitted to the signal vector on the constellation.

3.1.5

Control logical channel the physical layer logical channel used to transmit system control information. The channel parameters are fixed.

3.1.6

Scattered pilot

Pilots with different positions in adjacent OFDM symbols.

3.1.7

Continuous pilot

Pilots with the same position in adjacent OFDM symbols.

3.1.8

Forward error correction code A coding structure that obtains error correction capabilities by adding redundant information.

3.1.9

Scramble code

Binary sequence for data randomization.

3.1.10

Upper-layer data stream A data stream allocated by an upper-layer protocol and broadcast to a terminal via a logical channel in the physical layer.

3.1.11

Time slot

Signal segments with a fixed time length in the physical layer signal frame can be received separately by the terminal.

3.1.12

Data sub-carrier

A subcarrier in an OFDM symbol used to carry an upper layer data stream.

3.1.13

Physical logical channel the physical layer carries the transmission channels of the upper-layer service data streams. Each physical layer logical channel is independently coded and modulated, which can occupy one or more Time slot.

3.1.14

Beacon

A signal at the beginning of each time slot, including the transmitter identification signal and the synchronization signal.

3.1.15

Virtual sub-carrier