**H04H**

**BROADCAST COMMUNICATION (multiplex communication H04J; pictorial communication aspects of broadcast systems H04N)**

**Definition statement**

*This place covers:*
- arrangements for broadcast or for distribution combined with broadcast;
- arrangements specially adapted for receiving broadcast information;
- arrangements for broadcast applications with a direct linkage to broadcast information or to broadcast space-time; broadcast-related systems.

**References**

**Limiting references**

*This place does not cover:*

<table>
<thead>
<tr>
<th>Multiplex communication</th>
<th>H04J</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pictorial communication aspects in broadcast systems</td>
<td>H04N</td>
</tr>
</tbody>
</table>

**Informative references**

*Attention is drawn to the following places, which may be of interest for search:*

| Transmission in general | H04B          |

**Special rules of classification**

In this subclass, multi-aspect classification is applied, so that subject matter characterised by aspects covered by more than one of its groups in this subclass, which is considered to represent information of interest for search, may also be classified in each of those groups.

**Glossary of terms**

*In this place, the following terms or expressions are used with the meaning indicated:*

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broadcast</td>
<td>simultaneous distribution of identical signals to plural receiving stations. The term “broadcast” does not include distribution to receiving stations which is controlled by requests or responses from the receiving stations</td>
</tr>
<tr>
<td>Broadcast information</td>
<td>all kinds of information distributed by broadcast systems, e.g. broadcast programme</td>
</tr>
<tr>
<td>Broadcast-related information</td>
<td>information required by services provided via broadcast systems, other than broadcast information</td>
</tr>
<tr>
<td>Broadcast time</td>
<td>a time when particular broadcast information exists and is available</td>
</tr>
<tr>
<td>Broadcast channel</td>
<td>a channel via which broadcast information is distributed, e.g. carrier waves, time slots, cables or wireless broadcast service areas</td>
</tr>
<tr>
<td>Broadcast space</td>
<td>either a set of broadcast channels in which particular broadcast information exists and is available or a geographical area determined by the set of broadcast channels</td>
</tr>
<tr>
<td>Broadcast space-time</td>
<td>space-time determined by broadcast space and broadcast time in which particular broadcast information exists and is available</td>
</tr>
<tr>
<td>Broadcast system</td>
<td>a system which consists of transmitter, transponder and receiver for broadcast</td>
</tr>
<tr>
<td>------------------</td>
<td>--------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Broadcast-related system</td>
<td>a system which is directly affected by generation, broadcast, reception or use of broadcast information</td>
</tr>
<tr>
<td>Broadcast service</td>
<td>a service provided by a broadcast system, i.e. distribution service of broadcast information</td>
</tr>
<tr>
<td>Broadcast-related service</td>
<td>a service directly provided by broadcast-related systems</td>
</tr>
<tr>
<td>“A with a direct linkage to B”</td>
<td>“A directly affects B” or “A is directly affected by B”</td>
</tr>
</tbody>
</table>

**Synonyms and Keywords**

*In patent documents, the following abbreviations are often used:*

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>CATV</td>
<td>Community Antenna Television</td>
</tr>
<tr>
<td>EPG</td>
<td>Electronic Programme Guide</td>
</tr>
<tr>
<td>FPU</td>
<td>Field Pickup Unit</td>
</tr>
<tr>
<td>MATV</td>
<td>Master Antenna Television</td>
</tr>
<tr>
<td>MP3</td>
<td>MPEG-1 Audio Layer 3</td>
</tr>
<tr>
<td>URL</td>
<td>Uniform Resource Locator</td>
</tr>
</tbody>
</table>

**H04H 20/00**

Arrangements for broadcast or for distribution combined with broadcast

**Definition statement**

*This place covers:*

- arrangements for broadcast distribution;
- combinations of broadcast distribution arrangements, or combinations of broadcast and non-broadcast distribution arrangements.

**H04H 20/02**

Arrangements for relaying broadcast information

**Definition statement**

*This place covers:*

Arrangements for a relay specially adapted for broadcast distribution or broadcast programme.

**References**

*Informative references*

*Attention is drawn to the following places, which may be of interest for search:*

<table>
<thead>
<tr>
<th>Reference Description</th>
<th>CPC Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repeater circuits for line transmission in general</td>
<td>H04B 3/36</td>
</tr>
<tr>
<td>Relay systems for radio transmission in general</td>
<td>H04B 7/14</td>
</tr>
</tbody>
</table>
H04H 20/10
Arrangements for replacing or switching information during the broadcast or the distribution

Definition statement
This place covers:
The system which substitutes or switches distributed information in real-time at the time of broadcast distribution or of distribution combined with broadcast.

H04H 20/12
Arrangements for observation, testing or troubleshooting

References
Informative references
Attention is drawn to the following places, which may be of interest for search:

| Monitoring of a broadcast-related system | H04H 60/29 |

H04H 20/14
for monitoring programmes

Definition statement
This place covers:
The system which monitors whether a scheduled broadcast programme has been broadcast or not.

H04H 20/20
Arrangements for broadcast or distribution of identical information via plural systems

Definition statement
This place covers:
The arrangements in which the same information is distributed by plural distribution systems.

H04H 20/22
Arrangements for broadcast of identical information via plural broadcast systems

Definition statement
This place covers:
The system which broadcasts the same information by the plural broadcast systems.
**H04H 20/24**

Arrangements for distribution of identical information via broadcast system and non-broadcast system

**Definition statement**

This place covers:

The system which broadcasts the same information by broadcast system and non-broadcast system, e.g. mobile communication network.

**H04H 20/26**

Arrangements for switching distribution systems

**Definition statement**

This place covers:

Arrangements for selecting a distribution system from two or more broadcast systems and/or distribution systems combined with broadcast.

**H04H 20/28**

Arrangements for simultaneous broadcast of plural pieces of information

**Definition statement**

This place covers:

Multiplex communication specially adapted for broadcast distribution.

**H04H 20/33**

by plural channels

**Definition statement**

This place covers:

The system which requires multiple channels to broadcast plural portions of information simultaneously.

**H04H 20/42**

Arrangements for resource management

**Definition statement**

This place covers:

The arrangement for managing resources, e.g. transmission bandwidth, for a broadcast distribution or for a distribution combined with broadcast distribution.
H04H 20/44
Arrangements characterised by circuits or components specially adapted for broadcast

References
Informative references
Attention is drawn to the following places, which may be of interest for search:

| A receiving circuit or a component specially adapted for broadcast | H04H 40/27 |
| A transmitting circuit in general | H04B 1/04 |

H04H 20/46
specially adapted for broadcast systems covered by groups H04H 20/53-H04H 20/95

Definition statement
This place covers:
A circuit or a component for broadcast distribution specially adapted for broadcast characterised by a use, a transmission system or broadcast information.

Special rules of classification
The technical subject covered by this group could also be classified to one of the groups (H04H 20/53-H04H 20/86) to clarify specialty of a use, a transmission system or broadcast information.

H04H 20/53
Arrangements specially adapted for specific applications, e.g. for traffic information or for mobile receivers

Definition statement
This place covers:
The broadcast system specially adapted to a special purpose or broadcast system used in a special situation.

H04H 20/55
for traffic information

Definition statement
This place covers:
Arrangements for broadcast adapted for vehicular traffic information.
**H04H 20/61**

for local area broadcast, e.g. instore broadcast

**Definition statement**

*This place covers:*

Arrangements for broadcast within specific areas.

**H04H 20/65**

Arrangements characterised by transmission systems for broadcast

**Definition statement**

*This place covers:*

The system wherein a technical aspect of a broadcast transmission system strongly affects to its broadcast service.

**References**

*Informative references*

Attention is drawn to the following places, which may be of interest for search:

| The system wherein a technical aspect of a non-broadcast transmission system, i.e. a transmission system other than for broadcast, strongly affects its broadcast service or broadcast-related service | H04H 60/76 |

**H04H 20/79**

using downlink of the CATV systems, e.g. audio broadcast via CATV network

**Definition statement**

*This place covers:*

Arrangements in which CATV downlink channels are used as a broadcast transmission path.

**H04H 20/81**

combined with telephone network over which the broadcast is continuously available

**References**

*Informative references*

Attention is drawn to the following places, which may be of interest for search:

| Telephonic communication in general | H04M |
**H04H 20/84**

combined with power distribution network

**References**

*Informative references*

Attention is drawn to the following places, which may be of interest for search:

| Power line communication in general | H04B 3/54 |

**H04H 20/86**

Arrangements characterised by the broadcast information itself

**Definition statement**

*This place covers:*

Arrangements for broadcast distribution of explicitly distinguishable and striking information which plays a very important role to specify a technical subject.

**H04H 20/88**

Stereophonic broadcast systems (multiplex system in general H04J)

**Definition statement**

*This place covers:*

Arrangements for broadcast characterised by broadcast information which is stereophony.

**H04H 20/95**

characterised by a specific format, e.g. MP3 (MPEG-1 Audio Layer 3)

**Definition statement**

*This place covers:*

The arrangement for broadcast distribution of information which has a special data format (a format which is not used in an ordinary broadcast specification).

**H04H 40/00**

Arrangements specially adapted for receiving broadcast information

**Definition statement**

*This place covers:*

Only broadcast-specific receivers.

**References**

*Informative references*

Attention is drawn to the following places, which may be of interest for search:

| Receivers in general | H04B 1/06 |
H04H 40/18

Arrangements characterised by circuits or components specially adapted for receiving

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

| Circuits or components specially adapted for broadcast distribution | H04H 20/44 |
| Receiver circuits in general | H04B 1/16 |

H04H 40/27

specially adapted for broadcast systems covered by groups H04H 20/53 - H04H 20/95

Definition statement

This place covers:
The circuit or component for a broadcast receiver specially adapted for broadcast with characteristic use, transmission system or broadcast information.

Special rules of classification

The technical subject covered by this group could also be classified to one of the groups (H04H 20/53-H04H 20/86) to clarify specialty of a use, a transmission system or broadcast information.

H04H 40/36

specially adapted for stereophonic broadcast receiving

Definition statement

This place covers:
The circuit or component for communication specially adapted for receiving broadcast information of stereophony.

H04H 60/00

Arrangements for broadcast applications with a direct linking to broadcast information or broadcast space-time; Broadcast-related systems

Definition statement

This place covers:
• arrangements for broadcast application which directly affects broadcast information or broadcast space-time;
• arrangements for broadcast application which is directly affected by broadcast information or broadcast space-time;
• broadcast-related system, i.e. other system which is directly affected by generation, broadcast, reception or use of broadcast information.
H04H 60/02
Arrangements for generating broadcast information; Arrangements for generating broadcast-related information with a direct linking to broadcast information or to broadcast space-time; Arrangements for simultaneous generation of broadcast information and broadcast-related information

Definition statement
This place covers:
• arrangements for generating broadcast information;
• arrangements for generating broadcast-related information which directly affects broadcast information or broadcast space-time;
• arrangements for generating broadcast-related information which is directly affected by broadcast information or broadcast space-time;
• arrangements for simultaneous generation of broadcast information and broadcast-related information.

H04H 60/04
Studio equipment; Interconnection of studios

References
Informative references
Attention is drawn to the following places, which may be of interest for search:

| Arrangements for producing a reverberation or echo sound | G10K 15/08 |

H04H 60/09
Arrangements for device control with a direct linkage to broadcast information or to broadcast space-time; Arrangements for control of broadcast-related services

Definition statement
This place covers:
• arrangements for device control which directly affects broadcast information or broadcast space-time;
• arrangements for device control which is directly affected by broadcast information or broadcast space-time.

H04H 60/27
Arrangements for recording or accumulating broadcast information or broadcast-related information

References
Informative references
Attention is drawn to the following places, which may be of interest for search:

| Receivers in general with memory | H04B 1/06 |
H04H 60/29
Arrangements for monitoring broadcast services or broadcast-related services

References
Informative references
Attention is drawn to the following places, which may be of interest for search:

| Monitoring of the broadcast system itself | H04H 20/12 |
| Monitoring whether a scheduled broadcast programme has been broadcast or not | H04H 20/14 |

H04H 60/35
Arrangements for identifying or recognising characteristics with a direct linkage to broadcast information or to broadcast space-time, e.g. for identifying broadcast stations or for identifying users

Definition statement
This place covers:
• arrangements for identifying or recognising characteristics which directly affects broadcast information or broadcast space-time;
• arrangements for identifying or recognising characteristics which is directly affected by broadcast information or broadcast space-time.

H04H 60/38
for identifying broadcast time or space

Definition statement
This place covers:
Arrangements for identifying in which range in space or time a certain portion of broadcast information exists.

H04H 60/39
for identifying broadcast space-time (use of Electronic Programme Guides H04H 60/72)

Definition statement
This place covers:
Arrangements for identifying both broadcast time and broadcast space.

References
Limiting references
This place does not cover:

| Systems characterised by using EPGs | H04H 60/72 |
**H04H 60/41**  
for identifying broadcast space, i.e. broadcast channels, broadcast stations or broadcast areas

**Definition statement**  
This place covers:  
• arrangements for identifying a set of broadcast channels in which particular broadcast information exists and is available or  
• arrangements for identifying a geographical area determined by the set of broadcast channels.

**H04H 60/42**  
for identifying broadcast areas

**Definition statement**  
This place covers:  
Arrangements for identification of a geographical area as broadcast space.

**H04H 60/43**  
for identifying broadcast channels

**Definition statement**  
This place covers:  
Arrangements for identification of a channel set as broadcast space.

**H04H 60/44**  
for identifying broadcast stations

**Definition statement**  
This place covers:  
Arrangements for identifying broadcast stations with the aim of identifying broadcast space.

**H04H 60/56**  
Arrangements characterised by components specially adapted for monitoring, identification or recognition covered by groups H04H 60/29-H04H 60/54

**Definition statement**  
This place covers:  
Technical subjects covered by H04H 60/29 or H04H 60/35 in which a component for monitoring, identification or recognition especially plays an important role.

**Special rules of classification**  
The technical subject covered by this group could also be classified to one of the groups (H04H 60/29 or H04H 60/35) to clarify the object of monitoring, identification or recognition.
H04H 60/58
of audio {(determination or detection of speech characteristics in general G10L 25/00; speech recognition in general G10L 15/00)}

References
Informative references
Attention is drawn to the following places, which may be of interest for search:

| Speech recognition in general | G10L 15/00 |
| Determination or detection of speech characteristics in general | G10L 25/00 |

H04H 60/59
of video {(recognising characters or patterns in general G06K 9/00)}

References
Informative references
Attention is drawn to the following places, which may be of interest for search:

| Recognising characters or patterns in general | G06K 9/00 |

H04H 60/61
Arrangements for services using the result of monitoring, identification or recognition covered by groups H04H 60/29-H04H 60/54

Definition statement
This place covers:
Technical subjects which are covered by H04H 60/29 or H04H 60/35, and are more strongly focused on a use of monitoring, identification or recognition outcome than its process, e.g. an integrated system which consists of (1) a broadcast reception subsystem which receives a broadcast music programme, and monitors broadcast time and a broadcast channel to which a user is tuning in, (2) a broadcast related information retrieving subsystem which firstly identifies numbers a user has listened to by looking up a broadcast database with the broadcast time and the broadcast channel, and secondly identifies compact discs which include the numbers by searching a compact disc information database, and (3) a online compact disc sales subsystem for selling the compact discs which include the numbers to the user over the Internet.

Special rules of classification
The technical subject covered by this group could also be classified to one of the groups (H04H 60/29 or H04H 60/35) to clarify the object of monitoring, identification or recognition.
H04H 60/63
for services of sales {(data processing systems or methods specially adapted for electronic commerce G06Q 30/00)}

References
Informative references
Attention is drawn to the following places, which may be of interest for search:

| Electronic commerce in general | G06Q 30/00 |

H04H 60/68
Systems specially adapted for using specific information, e.g. geographical or meteorological information

Definition statement
This place covers:
Explicitly distinguishable and striking information which plays a very important role to specify a technical subject.

H04H 60/72
using EPGs [Electronic Programme Guides] (focusing on identifying broadcast space-time H04H 60/39; {menu type display of EPG in television receivers H04N 5/44543})

References
Limiting references
This place does not cover:

| Systems characterised by EPG mainly focusing on identifying broadcast space-time | H04H 60/39 |

H04H 60/74
using programme related information, e.g. title, composer or interpreter

Definition statement
This place covers:
Special type of meta-information, which is related to broadcast programme, e.g. title, composer or interpreter of broadcast music.
**H04H 60/76**

**Arrangements characterised by transmission systems other than for broadcast, e.g. the Internet {(for broadcast H04H 20/65)}**

**References**

*Informative references*

Attention is drawn to the following places, which may be of interest for search:

| Transmission systems for broadcast | H04H 20/65 |

**H04H 60/78**

**characterised by source locations or destination locations**

**Definition statement**

*This place covers:*

Technical subjects characterised by an entity of transmission or reception.

**H04H 60/81**

**characterised by the transmission system itself**

**Definition statement**

*This place covers:*

Technical subjects covered by group H04H 60/76 wherein characteristics of transmission system not for broadcast, e.g. structure of transmission path or network composition of non-broadcast distribution system, acutely affect the technical subject.

**H04H 60/91**

**Mobile communication networks (for accessing the Internet H04H 60/85)**

**References**

*Limiting references*

*This place does not cover:*

| Mobile communication networks used for the Internet access | H04H 60/85 |

*Informative references*

Attention is drawn to the following places, which may be of interest for search:

| Selective distribution of broadcast; Services to user groups; One-way selective calling services using wireless communication network. | H04W 4/06 |
H04H 60/94
Telephonic networks (for accessing the Internet H04H 60/84)

References
Limiting references
This place does not cover:

| Telephonic networks used for the Internet access | H04H 60/84 |

Informative references
Attention is drawn to the following places, which may be of interest for search:

| Telephonic communication in general | H04M |

H04H 60/96
CATV systems (for accessing the Internet H04H 60/86)

References
Limiting references
This place does not cover:

| CATV networks used for the Internet access | H04H 60/86 |