

SUMMARY OF THE INVENTION

PROBLEMS TO BE SOLVED BY THE INVENTION

[0005]

By the way, when a user interface (UI), for example,
5 for program information is presented to people with visual
disabilities, the text information of the program information
is read aloud with a Text To Speech (TTS) engine. This is
a typical way to enhance the accessibility.

[0006]

10 However, when the TTS engine is used, the text
information is not necessarily read aloud as the producer of
the program information intends. It is uncertain whether
people with visual disabilities can receive the information
similar to the information that able-bodied people receive.
15 In light of the foregoing, a technology with which utterance
as the producer intends is surely performed so that people
with visual disabilities can receive the information similar
to the information that able-bodied people receive.

[0007]

20 In light of the foregoing, embodiments of the present
invention enable the enhancement in the accessibility for
people with visual disabilities by surely performing utterance
as the producer intends.

25 SOLUTIONS TO PROBLEMS

[0008]

According to a first aspect, there is provided a
transmission device including: a metadata generation unit that
generates metadata about text-to-speech utterance of display
30 information, the text-to-speech utterance being performed as
a producer intends; an electronic program

According to a second aspect, there is provided a reception device including: a reception unit that receives electronic program information, the electronic program information being transmitted from a transmission device, the
5 electronic program information including the metadata about text-to-speech utterance of display information, the text-to-speech utterance being performed as a producer intends; a metadata acquisition unit that acquires the metadata included in the electronic program information; and a
10 text-to-speech reading aloud unit that reads the display information aloud on the basis of the metadata. [0015]

In the transmission device and transmission method according to the above aspects of the present invention, the metadata about the text-to-speech utterance that the producer
15 intends is generated for display information, and the electronic program information including the metadata is generated. Then, the electronic program information is transmitted to a reception device capable of displaying the display information.

20 [0016]

According to a third aspect, there is provided a reception device including: a reception unit that receives electronic program information, the electronic program information being transmitted from a transmission device, the
25 electronic program information including the metadata about text-to-speech utterance of display information, the text-to-speech utterance being performed as a producer

intends; a metadata acquisition unit that acquires the metadata included in the electronic program information; and a text-to-speech reading aloud unit that reads the display information aloud on the basis of the metadata.

5 [0017]

The metadata can include information about utterance of a character string of which pronunciation is not uniquely determined, or a character string difficult to pronounce.

[0018]

10 The display information can include information or an icon of a content.

[0019]

The reception unit can receive the electronic program information transmitted together with the content as a digital broadcast signal.

5 [0020]

The electronic program information can comply with ESG prescribed in OMA-BCAST, the metadata can be described in an SSML format, a predetermined fragment included in the ESG can include address information indicating an address at which
10 a file of the metadata described in the SSML format is acquired, or content of the metadata described in the SSML format, and the metadata acquisition unit can acquire the file of the metadata in accordance with the address information, or acquires the metadata from the fragment.

15 [0021]

The reception device can be an independent device, or can be an internal block included in a device.

[0022]

According to a fourth aspect, there is provided a
20 reception method for causing a reception device to perform a process, the process including: receiving electronic program information, the electronic program information being transmitted from a transmission device, the electronic program information including the metadata about text-to-speech
25 utterance of display information, the text-to-speech utterance being performed as a producer intends; acquiring the metadata included in the electronic program information; and reading the display information aloud on the basis of the metadata.

[0023]

In the reception device and reception method according to the above aspects of the present invention, the electronic program information, which includes the metadata about the text-to-speech utterance of the display information as the
5 producer intends and is transmitted from the transmission device, is received. Then, the metadata included in the electronic program information is acquired, and the display information is read aloud on the basis of the metadata.

EFFECTS OF THE INVENTION

[0024]

According to the above aspects of the present invention,
the accessibility for people with visual disabilities can be
5 enhanced.

[0025]

Note that the effects of embodiments of the present
invention are not necessarily limited to the effect described
above, and can be any one of the effects described herein.

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BRIEF DESCRIPTION OF DRAWINGS

[0026]

Fig. 1 is a diagram of an example in which program
information and a title are read aloud.

15 Fig. 2 is a diagram of an example in which an icon is
read aloud.

Fig. 3 is an explanatory diagram of an example in which
text information is read aloud with an existing TTS engine.

20 Fig. 4 is an explanatory diagram of an example in which
text information is read aloud with an existing TTS engine.

Fig. 5 is an explanatory diagram of an example in which
text information is read aloud with a TTS engine to which the
present technology is applied.

25 Fig. 6 is an explanatory diagram of an example in which
text information is read aloud with a TTS engine to which the
present technology is applied.

Fig. 7 is a diagram of an exemplary configuration of
a broadcasting system to which the present technology is
applied.

30 Fig. 8 is a diagram of an exemplary configuration of
a transmission device to which the present technology is