
**Information technology — Multimedia
application format (MPEG-A) —**

Part 11:

Stereoscopic video application format

AMENDMENT 2: Signalling of additional
composition type and profiles

*Technologies de l'information — Format pour application multimédia
(MPEG-A) —*

Partie 11: Format pour application vidéo stéréoscopique

*AMENDEMENT 2: Signalement d'un type et de profils de composition
additionnels*

ISO/IEC 23000-11:2009/Amd 2:2011



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Foreword

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International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of the joint technical committee is to prepare International Standards. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

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Amendment 2 to ISO/IEC 23000-11:2009 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 29, *Coding of audio, picture, multimedia and hypermedia information*.

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Information technology — Multimedia application format (MPEG-A) —

Part 11:

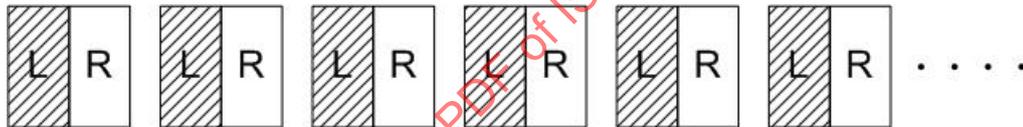
Stereoscopic video application format

AMENDMENT 2: Signalling of additional composition type and profiles

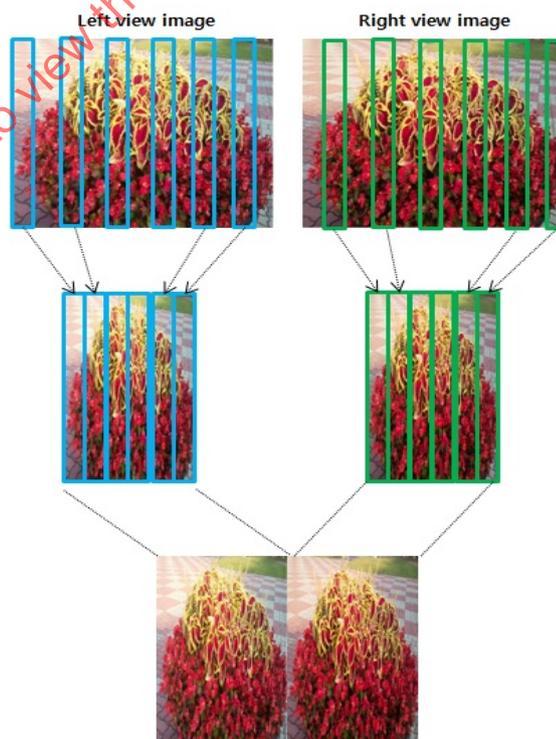
Replace 5.3.1 with:

5.3.1 Side-by-side type

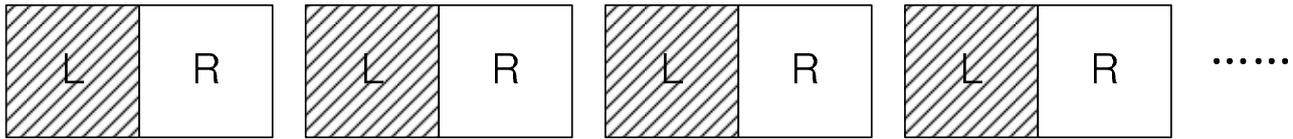
Side-by-side type is one of the most widely used stereoscopic composition types. Two respective left view and right view images are put together into one composition image being shown in Figure 2, which shows examples of side-by-side type when the left (right) view part locates in the left (right) side of composition image. It can be rendered in the legacy player and implemented without modification of the system.



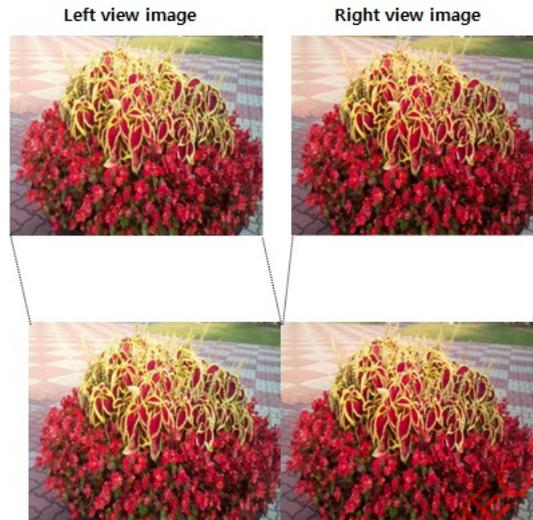
(a) Side-by-side (half) type stereoscopic sequence



(b) Side-by-side (half) type contents for real image



(c) Side-by-side (full) type stereoscopic sequence



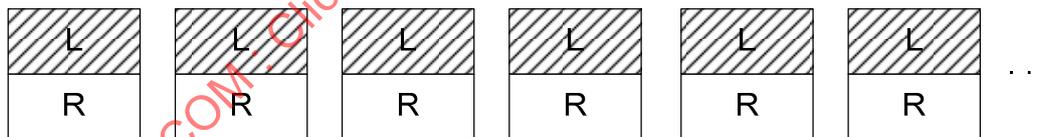
(d) Side-by-side (full) type contents for real image

Figure 2 — Examples of the Side-by-side type

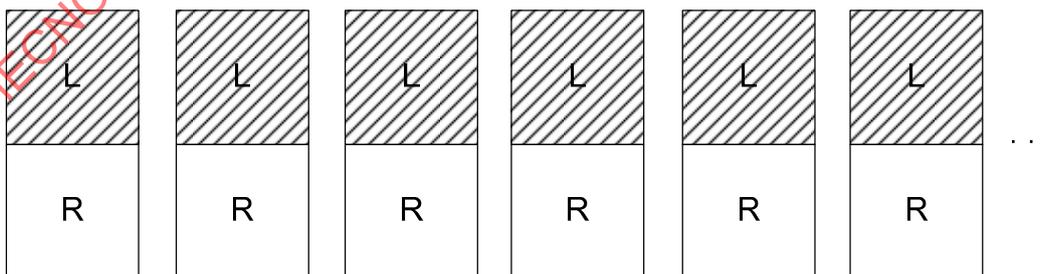
After 5.3.4, add the following:

5.3.5 Top-Bottom type

Two respective left view and right view images are put together into one composition image being shown in Figure AMD2.1, which shows examples of Top-Bottom type when the left (right) view part locates in top (bottom) side of composition image. It can be rendered in the legacy player and implemented without modification of the system.



(a) Top-Bottom (half) type stereoscopic sequence



(b) Top-Bottom (full) type stereoscopic sequence

Figure AMD2.1 — Examples of Top-Bottom type

In 6.1, replace Table 1 with:

Table 1 — Supported components of Stereoscopic Video AF

| Type | Component Name | Specification | Standard | |
|-------------|----------------------------|--|-------------------|-----------------------|
| File format | ISO base media file format | ISO/IEC 14496-12 | ISO/IEC Standards | |
| Visual | MPEG-4 Video | ISO/IEC 14496-2 Simple Profile Level 3, ISO/IEC 14496-2 Advanced Simple Profile Level 5 | | |
| | MPEG-4 AVC | ISO/IEC 14496-10 Baseline Profile Level 1.3, ISO/IEC 14496-10 High Profile Level 4.1 | | |
| Audio | MPEG-4 Audio AAC | ISO/IEC 14496-3 | | |
| | MPEG-4 Audio HE-AAC | ISO/IEC 14496-3 | | |
| Data | MPEG-4 LAsER | ISO/IEC 14496-20 | | |
| | JPEG Image | ISO/IEC 10918-1 | | |
| | PNG Image | ISO/IEC 15948 | | |
| Voice | AMR | 3GPP TS 26.071 | | Non-ISO/IEC Standards |
| | EVRC | TIA/EIA/IS-127 | | |

In 8.4.3, replace Table 4 with:

Table 4 — Stereoscopic composition type

| Value | Stereoscopic_composition_type |
|-----------|--------------------------------|
| 0x00 | Side-by-side (half) type |
| 0x01 | Vertical line interleaved type |
| 0x02 | Frame sequential type |
| 0x03 | Left/Right view sequence type |
| 0x04 | Top-Bottom (half) type |
| 0x05 | Side-by-side (full) type |
| 0x06 | Top-Bottom (full) type |
| 0x07-0xFF | Reserved |

In 8.4.3, replace Table 5 with:

Table 5 — The positions of stereoscopic Left/Right view according to the is_left_first value

| Type | is_left_first = 1 | | is_left_first = 0 | |
|---------------------------|-----------------------|-------------------------|-------------------------|-----------------------|
| | Left view | Right view | Left view | Right view |
| Side-by-side (half/full) | Left side | Right side | Right side | Left side |
| Vertical line interleaved | Odd line | Even line | Even line | Odd line |
| Frame sequential | Odd frame | Even frame | Even frame | Odd frame |
| Left/Right view sequence | Primary view sequence | Secondary view sequence | Secondary view sequence | Primary view sequence |
| Top-Bottom (half/full) | Top side | Bottom side | Bottom side | Top side |

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