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29/WG 11**

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Title: AHG9: APS, LMCS, deblocking and PPS constraints

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Purpose: Proposal

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Source: Qualcomm

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Abstract

This contribution proposes to add a constraint for APS type based on the enabled tools in SPS. If a tool, which uses an APS, is disabled then the APS with the corresponding APS type should not be present in a bitstream. Secondly, the contribution proposes to add a constraint for CCALF filters in an ALF APS based on CCALF SPS enable flag. If CCALF is disabled in SPS, an ALF_APS cannot contain any CCALF filters. Thirdly, the contribution proposes to add constraints for chroma deblocking and chroma LMCS scaling parameter for monochrome content, similar constraints are already in place for other chroma related tools and syntax elements. At last, as another option, to decouple constraints in both PPS and APS from SPS, ChromaArrayType and BitDepth constraints are removed from both PPS and APS semantics.

Introduction

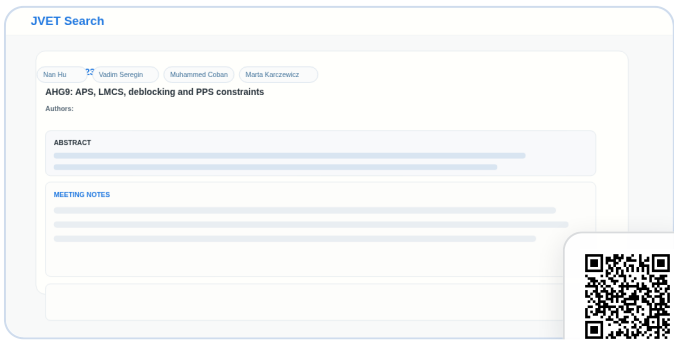
In VVC draft 8, some APS types can still be present in a bitstream even if the corresponding tools are disabled in SPS. This contribution proposes to add a constraint for APS type. If a tool, which using an APS, is disabled, an APS with the corresponding APS type should not be present in a bitstream.

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CARD

JVET-R0232

<http://vexpertise.stbit.ru/documents/JVET-R0232>



ARCHIVE

archive v2

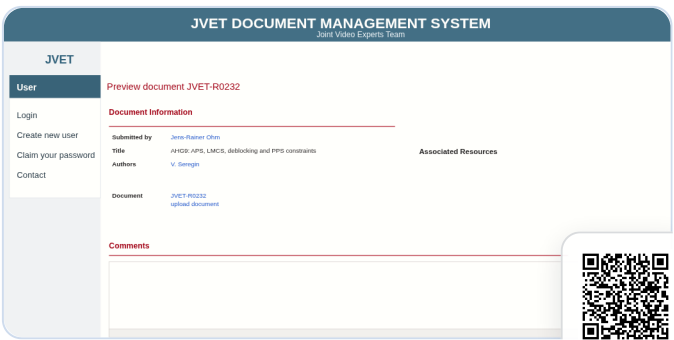
https://jvet-experts.org/doc_end_user/documents/18_Alpbach/wg11/JVET-R0232-v2.zip



SOURCE

external source

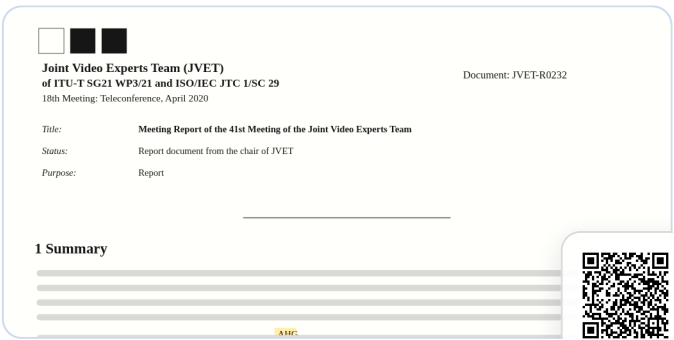
https://jvet-experts.org/doc_end_user/current_document.php?id=9876



MEETING NOTES

external meeting notes

https://www.itu.int/wftp3/av-arch/jvet-site/2020_04_R_Alpbach/JVET-R_Notes_dH.docx



MEETING NOTES

JVET-R0232 AHG9: APS, LMCS, deblocking and PPS constraints [N. Hu, V. Seregin, M. Coban, M. Karczewicz (Qualcomm)]

Deblocking control signalling - other aspects (5)

JVET-R0232 AHG9: APS, LMCS, deblocking and PPS constraints [N. Hu, V. Seregin, M. Coban, M. Karczewicz (Qualcomm)]

All aspects excluding the deblocking aspect of this contribution belong this this category.

CITATION

N. Hu, V. Seregin, M. Coban, M. Karczewicz, "AHG9: APS, LMCS, deblocking and PPS constraints", JVET-R0232, 18th Meeting: Teleconference, April 2020.