Non-CE6:
Unified neighboring positions for intra mode coding

JCTVC-G184

Shigeru Fukushima , Hiroya Nakamura

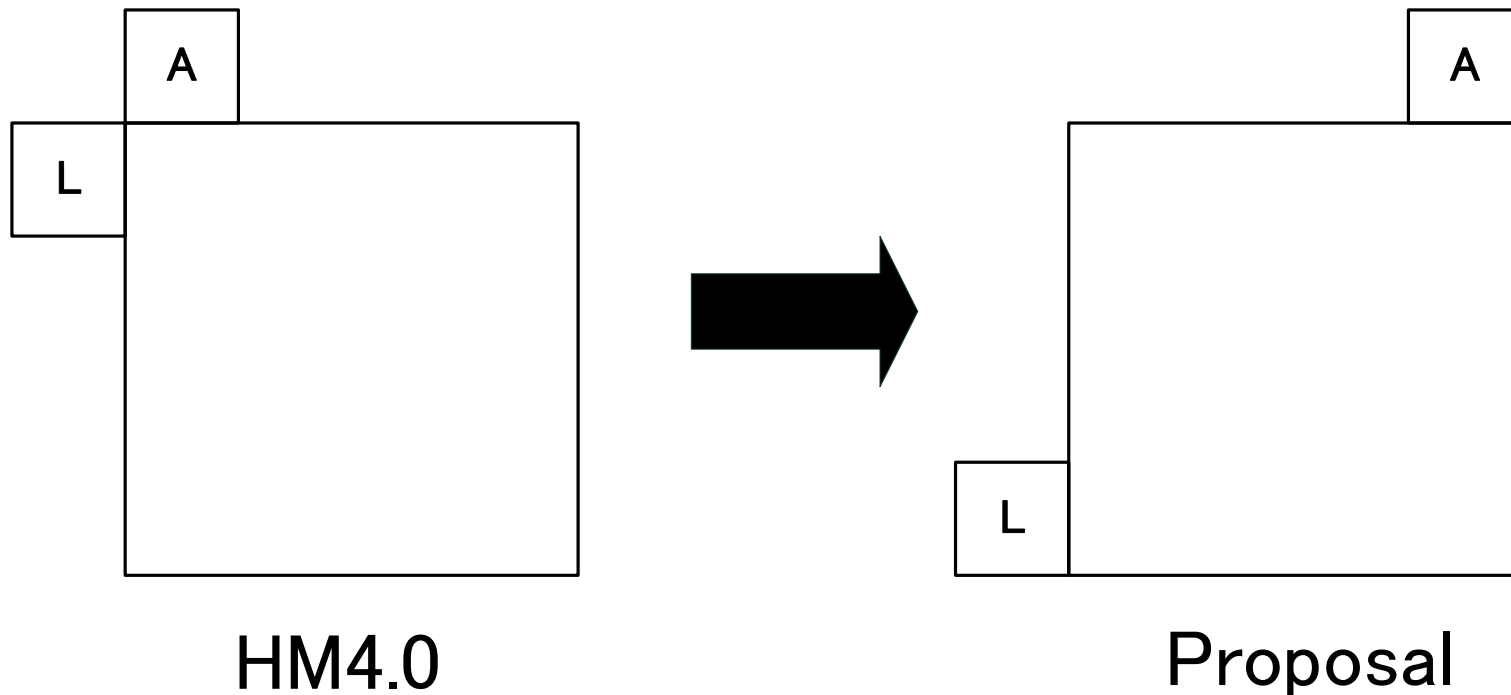JVC KENWOOD Corporation

1. Overview

Overview

- **Proposed technique**

  - Unified neighboring positions for intra mode coding

- **Algorithm**

  - Unify the positions for intra/inter mode coding

  - Change the positions of intra mode coding

- **Crosscheck**

  - JCTVC-G475 by MediaTek

- **Simulation results**

  - Overall BD-rate gain 0.03% for IHE and ILC

2. Algorithm

Algorithm

HM4.0

Proposal

- ■ Advantage

  - ■ Memory access reduction for encoding

  - ■ Recognize neighboring positions without distinction of intra/inter for decoding

3. Experiments

Experiments

- Overall BD-rate gain 0.03% for IHE and ILC

	All Intra HE			All Intra LC		
	Y	U	V	Y	U	V
Class A	-0.03%	-0.07%	-0.04%	-0.02%	0.02%	-0.05%
Class B	-0.04%	-0.06%	-0.07%	-0.03%	-0.03%	-0.02%
Class C	-0.04%	-0.02%	-0.04%	-0.03%	-0.06%	-0.06%
Class D	-0.01%	-0.08%	-0.04%	-0.02%	0.03%	-0.02%
Class E	-0.04%	-0.12%	-0.06%	-0.04%	-0.07%	-0.03%
Overall	-0.03%	-0.07%	-0.05%	-0.03%	-0.02%	-0.03%
	-0.03%	-0.07%	-0.05%	-0.03%	-0.02%	-0.04%
Enc Time[%]	101%			101%		
Dec Time[%]	101%			101%		

4. Conclusion

Conclusion

- **Advantage**

  - Memory access reduction for encoding

  - Recognize neighboring positions without distinction of intra/inter for decoding

  - Minor coding gain (0.03%)

- **Suggestion**

  - Adopted to the next WD and HM

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