New Global Motion Algorithm

Tech ID: 20739 / UC Case 2003-210-0

TECHNOLOGY DESCRIPTION

UC San Diego inventors have devised a global motion estimation technique for affine motion vectors with the following benefits:

- Requires less computational overhead.
- Relies on the easy-to-compute FFT.
- Highly parallelizable.
- Robust to illumination changes and occlusion.
- Not significantly effected by calculations involving large movements.
- Does not require a starting guess.
- Scalable between accuracy computational power.
- MPEG4 object layer coding.

STATE OF DEVELOPMENT

Software has been implemented using this algorithm (see SD2010-813) and is available for licensing with the patent rights. Also see issued patent 7,349,583.

PATENT STATUS

Country	Type	Number	Dated	Case
United States Of America	Issued Patent	7,349,583	03/25/2008	2003-210

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INVENTORS

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OTHER INFORMATION

KEYWORDS

image processing, motion estimation, frame rate conversion, compression, MPEG4

CATEGORIZED AS

- **Communications**
  - Wireless

RELATED CASES

2003-210-0

ADDITIONAL TECHNOLOGIES BY THESE INVENTORS

- A Novel Multi-Stage Motion Vector Processing and Application in Motion Compensated Frame Interpolation

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