Chroma Upsampling from Motion
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Improve 4:1:1 YCbCr Decompression

Chroma Upsampling from Motion Algorithm

4:1:1 YCbCr video → Luma registration → Chroma upsampling from motion → 4:4:4 YCbCr recovered video

Related Work and Key Issues

- Altera motion-adaptive de-interlacing uses a buffer four fields deep
- MPEG interframe compression has emerged as the consumer standard
- Apply chroma upsampling from motion prior to MPEG conversion, to obtain optimum quality at the expense of effort
- Practical implementation would require moving object segregation and tracking

Experimental Results

Substantially better fidelity to color detail