Title (en)

METHOD AND APPARATUS FOR VERTICALLY SCALING PIXEL DATA

Title (de)

VERFAHREN UND VORRICHTUNG ZUR VERTIKALEN SKALIERUNG VON PIXELDATEN

Title (fr)

PROCEDE ET APPAREIL DE MISE A L'ECHELLE VERTICALE DE DONNEES PIXEL

Publication

EP 1741282 A1 20070110 (EN)

Application

EP 05740206 A 20050425

Priority

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Abstract (en)

[origin: WO2005112425A1] An image processing apparatus that includes a red, green and blue (RGB) color space to luminance color, blue color difference and red color difference (YCbCr) color space converter module for converting a line of pixels from the RGB color space to the YCbCr color space. The line of pixels has a first sampling rate. The image processing apparatus further comprises a chrominance decimator module coupled to the RGB to YCbCr color space converter module. The chrominance decimator module is configured to generate an intermediate representation of the line of pixels having a second sampling rate that is less than the first sampling rate. The amount of data representing the intermediate representation is less than the amount of data representing the line of pixels. The image processing apparatus further comprises a line store memory coupled to the chrominance decimator module. The line store memory is configured to store the intermediate representation. The image processing apparatus further comprises a vertical scaler module coupled to the line store memory. The vertical scaler module is configured to generate a scaled version of the intermediate representation. The image processing apparatus further comprises a chrominance interpolator module coupled to the vertical scaler module. The chrominance interpolator module is configured to convert the scaled version of the intermediate representation having the second sampling rate to a scaled version of the line of pixels having the first sampling rate. The image processing apparatus further comprises a YCbCr to RGB color space converter module coupled to the chrominance interpolator module. The YCbCr to RGB color space converter module is configured to convert the scaled version of the line of pixels from the YCbCr color space to the RGB color space.

IPC 8 full level

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Citation (search report)

See references of WO 2005112425A1

Citation (examination)

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DOCDB simple family (application)

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