

Title (en)
METHODS AND SYSTEMS FOR IMPROVING DISPLAY RESOLUTION IN IMAGES USING SUB-PIXEL SAMPLING AND VISUAL ERROR FILTERING

Title (de)
VERBESSERTES AUFLÖSUNGSVERMÖGEN VON BILDERN MITTELS SUBPIXELABTASTUNG UND VISUELLER FEHLERFILTERUNG

Title (fr)
PROCEDES ET SYSTEMES PERMETTANT D'AMELIORER LA RESOLUTION DES IMAGES SUR UN AFFICHAGE AU MOYEN D'UN ECHANTILLONNAGE SOUS-PIXEL ET D'UN FILTRAGE DES ERREURS VISIBLES

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Abstract (en)
[origin: WO0248960A2] The present invention provides a method and an apparatus for converting a color image of a higher-resolution to an image of a lower-resolution. With the method of the present invention, based on characteristics of spatial frequency responses of the human visual system, a lower-resolution image (116) is formed by separating a higher-resolution image (72) into a luminance channel (76) and chrominance channels (98 & 100) so as to carry out suitable sampling and filtering for each of the luminance channel (76) and the chrominance channels (98 & 100), then by combining the luminance channel (86) and the chrominance channels (111 & 114) after the sampling. As to the chrominance channels (98 & 100), traditional sub-sampling (101 & 103) is carried out to avoid chromatic aliasing, while sub-pixel sampling (80) is performed for the luminance channel (76) to improve resolution of luminance component.

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