

Title (en)  
Processing color sub-pixels

Title (de)  
Verarbeitung von Farb-Unterpixeln

Title (fr)  
Traitement de sous-pixels colorés

Publication  
**EP 2388773 A3 20120926 (EN)**

Application  
**EP 11167003 A 20110520**

Priority  

- US 34726310 P 20100521
- US 90717810 A 20101019
- US 90718910 A 20101019
- US 90720810 A 20101019

Abstract (en)  
[origin: EP2388773A2] A method may include receiving data pixels of a color image and mapping the color image to display pixels of a display device. Data pixels may have first and second color components, each component having an associated color property. Display pixels may have two or more sub-pixels. The mapping may include mapping a first color component of a first data pixel to a first sub-pixel of a first display pixel, mapping a second color component of a second data pixel to a second sub-pixel of the first display pixel, and storing the first and second color components in a memory. One or more sub-pixel locations in a color filter array map may be selected to diffuse quantization error. The method may include determining a first quantized color component, determining a first quantization error, and diffusing the first quantization error to the selected one or more sub-pixel locations. An embodiment is directed to a processor.

IPC 8 full level  
**G09G 5/02** (2006.01); **G09G 3/20** (2006.01)

CPC (source: EP)  
**G09G 3/2003** (2013.01); **G09G 3/2059** (2013.01); **G09G 5/02** (2013.01); **G09G 3/2044** (2013.01); **G09G 3/344** (2013.01); **G09G 5/06** (2013.01); **G09G 2300/0452** (2013.01); **G09G 2320/0242** (2013.01); **G09G 2320/041** (2013.01); **G09G 2320/0613** (2013.01); **G09G 2340/0457** (2013.01); **G09G 2360/144** (2013.01); **G09G 2360/16** (2013.01)

Citation (search report)  

- [I] US 2006132509 A1 20060622 - CHOE WON-HEE [KR], et al
- [I] US 2006158466 A1 20060720 - CHIEN CHIN-WEI [TW], et al
- [A] US 5701135 A 19971223 - ARATANI SHUNTARO [JP], et al
- [A] US 2002070948 A1 20020613 - MURAI KIYOAKI [JP], et al

Cited by  
CN104025183A; CN111474144A; GB2519777A; GB2519777B; CN108109570A; GB2556990B; CN109891381A; CN114495824A; US10269311B2; US9646547B2; US9984634B2; WO2018089106A1; WO2018118651A1; WO2016018534A1; US10074321B2; US10262387B2; WO2015153000A1; WO2017120185A1; WO2022125500A1; US10564715B2; US11783729B2

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 2388773 A2 20111123; EP 2388773 A3 20120926**

DOCDB simple family (application)  
**EP 11167003 A 20110520**