

Title (en)  
PROCESSING OF DIGITAL IMAGES

Title (de)  
VERARBEITUNG DIGITALER BILDER

Title (fr)  
TRAITEMENT D'IMAGES NUMERIQUES

Publication  
**EP 1421555 A1 20040526 (EN)**

Application  
**EP 02741593 A 20020625**

Priority  

- SE 0201244 W 20020625
- SE 0102254 A 20010626

Abstract (en)  
[origin: WO03001450A1] In a method for identifying individual objects in a digital image (I), a device is used that comprises a thresholding unit (20) and a threshold calculation unit (21). The thresholding unit (20) is designed to receive the digital image (I) and compare the luminance values of the digital image with threshold values (Ti) of a threshold matrix (T) in order to create a binary image on the basis of the comparison. The threshold calculation unit (21) is designed to estimate, on the basis of a first and second division of a reference image which corresponds to the digital image (I) into first and second subareas, a background luminance value for each first subarea and an object luminance value for each second subarea. For each overlapping first and second subarea, the threshold calculation unit (21) calculates a threshold value (Ti) on the basis on the associated background and object luminance values, and creates the threshold matrix (T) from said threshold values (Ti). The device and the method permit quick and memory-efficient identification of the individual objects, even if the digital image (I) contains variations in luminance and/or sharpness. A computer program product, a hardware circuit and a hand-held apparatus for position determination are also described.

IPC 1-7  
**G06T 5/00**

IPC 8 full level  
**G06K 9/22** (2006.01); **G06T 5/00** (2006.01); **G06T 7/00** (2006.01)

CPC (source: EP SE)  
**G06T 5/00** (2013.01 - SE); **G06T 5/50** (2013.01 - SE); **G06T 7/73** (2016.12 - EP); **G06V 30/1423** (2022.01 - EP); **G06T 2207/10048** (2013.01 - EP)

Citation (search report)  
See references of WO 03001450A1

Citation (third parties)  
Third party :

- US 5661506 A 19970826 - LAZZOUNI MOHAMED [US], et al
- US 5852434 A 19981222 - SEKENDUR ORAL F [US]
- DYMETMAN M; COPPERMAN M: "Intelligent paper", LECTURE NOTES IN COMPUTER SCIENCE, vol. 1375, March 1998 (1998-03-01), pages 392 - 406, XP002328425

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)  
**WO 03001450 A1 20030103**; EP 1421555 A1 20040526; SE 0102254 D0 20010626; SE 0102254 L 20021227

DOCDB simple family (application)  
**SE 0201244 W 20020625**; EP 02741593 A 20020625; SE 0102254 A 20010626