

Title (en)

SYSTEM AND METHOD FOR LOCATING POINTS OF INTEREST IN AN OBJECT IMAGE USING A NEURAL NETWORK

Title (de)

SYSTEM UND VERFAHREN ZUM FINDEN VON INTERESSIERENDEN PUNKTEN IN EINEM OBJEKTBILD UNTER VERWENDUNG EINES NEURONALEN NETZWERKS

Title (fr)

SYSTÈME ET PROCÉDÉ DE LOCALISATION DE POINTS D'INTÉRÊT DANS UNE IMAGE D'OBJET METTANT EN UVRE UN RÉSEAU DE NEURONES

Publication

EP 1866834 A2 20071219 (FR)

Application

EP 06725370 A 20060328

Priority

- EP 2006061110 W 20060328
- FR 0503177 A 20050331

Abstract (en)

[origin: WO2006103241A2] The invention relates to a system for locating at least two points of interest in an object image. According to the invention, one such system uses an artificial neural network and has a layered architecture comprising: an input layer (E) which receives the object image; at least one intermediate layer ($N_{₄}$, known as the first intermediate layer, consisting of a plurality of neurons ($N_{₄₁}$) that can be used to generate at least two saliency maps ($R_{_{5m}}$) which are each associated with a different pre-defined point of interest in the object image; and at least one output layer ($R_{₅}$) which contains the aforementioned saliency maps ($R_{_{5m}}$), said maps comprising a plurality of neurons which are each connected to all of the neurons in the first intermediate layer. According to the invention, the points of interest are located in the object image by the position ($17_{₁} 17_{₂} 17_{₃} 17_{₄}$) of a unique global maximum on each of the saliency maps.

IPC 8 full level

G06K 9/00 (2006.01); **G06K 9/46** (2006.01)

CPC (source: EP US)

G06N 3/048 (2023.01 - EP US); **G06N 3/084** (2013.01 - EP US); **G06V 10/443** (2022.01 - EP US); **G06V 40/171** (2022.01 - EP US)

Citation (search report)

See references of WO 2006103241A2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2006103241 A2 20061005; WO 2006103241 A3 20070111; CN 101171598 A 20080430; EP 1866834 A2 20071219;
FR 2884008 A1 20061006; JP 2008536211 A 20080904; US 2008201282 A1 20080821

DOCDB simple family (application)

EP 2006061110 W 20060328; CN 200680014936 A 20060328; EP 06725370 A 20060328; FR 0503177 A 20050331;
JP 2008503506 A 20060328; US 91015906 A 20060328