

Title (en)
APPARATUS AND METHOD FOR GENERATING A BLOOM EFFECT

Title (de)
VORRICHTUNG UND VERFAHREN ZUR ERZEUGUNG EINES BLOOM-EFFEKTS

Title (fr)
APPAREIL ET PROCÉDÉ DE PRODUCTION D'EFFET D'ÉBLOUISSEMENT

Publication
EP 4248396 A4 20240424 (EN)

Application
EP 21943456 A 20210531

Priority
CN 2021097482 W 20210531

Abstract (en)
[origin: WO2022252080A1] An image processing apparatus (1000) for generating a bloom effect comprising one or more processors (1001) and a memory (1002) storing in non-transient form data defining program code executable by the one or more processors (1001), wherein the program code, when executed by the one or more processors (1001), causes the image processing apparatus (1000) to: obtain an input image (901, 1701, 1801); generate a down-sampled image (502, 503) from the input image (902, 1802); select a region of one or more pixels of the down-sampled image (502, 503) in dependence on a brightness of the pixels (903, 1702, 1803); generate an up-sampled image region from the down-sampled image region (904, 1804); and generate an output bloom effect image (506) in dependence on the up-sampled image region (905, 1703, 1805). By generating an up-sampled image region from the down-sampled image region (904, 1804) and generating an output bloom effect image (506) in dependence on the up-sampled image region (905, 1703, 1805), it may be possible to enable the bloom effect algorithm (500) to reduce the number of sampling points to be up-sampled or filtered, which may reduce the computational load reducing the power consumption and rendering latency.

IPC 8 full level
G06T 11/00 (2006.01)

CPC (source: EP)
G06T 11/00 (2013.01)

Citation (search report)

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- [Y] ANONYMOUS: "python - Filter part of image using PIL - Stack Overflow", 13 August 2018 (2018-08-13), pages 1 - 3, XP093111641, Retrieved from the Internet <URL:https://stackoverflow.com/questions/9701515/filter-part-of-image-using-pil>
- [A] SCHUSTER KERSTEN ET AL: "High-Performance Image Filters via Sparse Approximations", PROCEEDINGS OF THE ACM ON COMPUTER GRAPHICS AND INTERACTIVE TECHNIQUES, vol. 3, no. 2, 26 August 2020 (2020-08-26), pages 1 - 19, XP055901748, Retrieved from the Internet <URL:https://dl.acm.org/doi/pdf/10.1145/3406182> DOI: 10.1145/3406182
- See also references of WO 2022252080A1

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

Designated validation state (EPC)
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