

(12) 按照专利合作条约所公布的国际申请

(19) 世界知识产权组织
国际局

(43) 国际公布日
2022 年 8 月 11 日 (11.08.2022)



(10) 国际公布号
WO 2022/166896 A1

(51) 国际专利分类号:
H04N 5/262 (2006.01) *G06T 11/00* (2006.01)

北京市海淀区知春路63号中国卫星通信大厦
今日头条小邮局, Beijing 100190 (CN)。

(21) 国际申请号: PCT/CN2022/075037

(74) 代理人: 上海光栅知识产权代理有限公司
(LINKER IP LLC); 中国上海市长宁区延安西路
889号702室, Shanghai 201109 (CN)。

(22) 国际申请日: 2022 年 1 月 29 日 (29.01.2022)

(25) 申请语言: 中文

(26) 公布语言: 中文

(30) 优先权:
202110163139.8 2021年2月5日 (05.02.2021) CN

(81) 指定国(除另有指明, 要求每一种可提供的国家
保护): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG,
BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU,
CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB,
GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, IT,
JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK,
LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX,
MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL,
PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL,
ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US,
UZ, VC, VN, WS, ZA, ZM, ZW。

(71) 申请人: 北京字跳网络技术有限公司
(BEIJING ZITIAO NETWORK TECHNOLOGY CO.,
LTD.) [CN/CN]; 中国北京市海淀区紫金数码园
4号楼2层0207, Beijing 100190 (CN)。

(72) 发明人: 王旭(WANG, Xu); 中国北京市海淀区
知春路63号中国卫星通信大厦今日头条小邮
局, Beijing 100190 (CN)。 刘凯(LIU, Kai); 中国

(54) Title: VIDEO GENERATION METHOD AND APPARATUS, AND DEVICE AND READABLE STORAGE MEDIUM

(54) 发明名称: 视频生成方法、装置、设备及可读存储介质

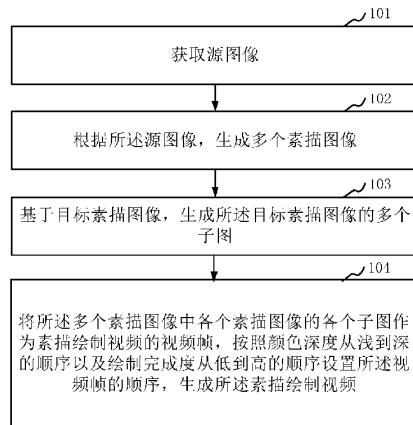


图 2

- 101 Acquire a source image
102 Generate a plurality of sketch images according to the source image
103 Generate a plurality of sub-images of a target sketch image on the basis of the target sketch image
104 Take each sub-image of each of the plurality of sketch images as a video frame of a sketch drawing video, and set the order of the video frames in color order from light to dark and in drawing completion degree order from low to high, so as to generate the sketch drawing video

(57) Abstract: Provided are a video generation method and apparatus, and a device and a readable storage medium. The method comprises: after acquiring a source image, an electronic device generating, on the basis of the source image and in color order from light to dark, sketch images of different stages in the process of simulating a painter to draw a target sketch; for each target sketch image, generating, in drawing completion degree order from high to low, a plurality of sub-images in the process of simulating the painter to draw the sketch image; and then, taking each sub-image of each of the plurality of sketch images as a video frame of a sketch drawing video, and setting the order of the video frames in color order from light to dark and in drawing completion degree order from low to high, so as to generate the sketch drawing video. During this process, various stages of the creation of a sketch image by a painter are simulated by means of image processing, the process is simple, and there is no need to perform a deep learning process, such that the efficiency is high.

[见续页]

(84) 指定国(除另有指明, 要求每一种可提供的地区保护): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), 欧亚 (AM, AZ, BY, KG, KZ, RU, TJ, TM), 欧洲 (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG)。

本国际公布:

— 包括国际检索报告(条约第21条(3))。

(57) 摘要: 本公开实施例提供一种视频生成方法、装置、设备及可读存储介质, 电子设备获取到源图像后, 基于源图像按照颜色从浅到深的顺序生成模拟画家绘制目标素描过程中不同阶段的素描图像, 针对每个目标素描图像, 按照绘制完成度从高到底的顺序生成模拟画家绘制该素描图像的过程中的多个子图, 然后将多个素描图像中各个素描图像的各个子图作为素描绘制视频的视频帧, 按照颜色深度从浅到深的顺序以及绘制完成度从低到高的顺序设置视频帧的顺序, 生成素描绘制视频。该过程中, 通过图像处理模拟画家创作素描图像的各个阶段, 过程简单, 且无需进行深度学习过程, 效率高。