



(51) International Patent Classification:

G06F 3/01 (2006.01) A63B 71/06 (2006.01)
A63F 13/428 (2014.01) G06F 3/04815 (2022.01)
G06F 3/04842 (2022.01) G06T 19/00 (2011.01)

(21) International Application Number:

PCT/US2021/052027

(22) International Filing Date:

24 September 2021 (24.09.2021)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/083,816 25 September 2020 (25.09.2020) US
17/483,730 23 September 2021 (23.09.2021) US

(63) Related by continuation (CON) or continuation-in-part (CIP) to earlier application:

US 17/483,730 (CON)
Filed on 23 September 2021 (23.09.2021)

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): 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,

(54) Title: DEVICES, METHODS, AND GRAPHICAL USER INTERFACES FOR INTERACTING WITH THREE-DIMENSIONAL ENVIRONMENTS

Scene 105

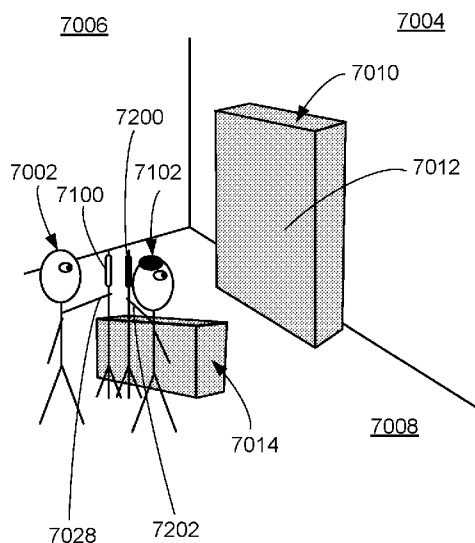


Figure 7A

(57) Abstract: A computer system displays a first user interface object with a first appearance at a first position in a first view of a three-dimensional environment that is at least partially shared between a first and second user. While displaying the first user interface object, the computer system detects a first user input by the first user. In response to detecting the first user input: in accordance with a determination that the second user is not currently interacting with the first user interface object, the computer system performs a first operation; and in accordance with a determination that the second user is currently interacting with the first user interface object, the computer system displays a visual indication, that the first user interface object is not available for interaction, including changing an appearance or position of the first user interface object, and forgoes performing the first operation.



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.

- (84) Designated States** (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (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).

Published:

- *with international search report (Art. 21(3))*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

(88) Date of publication of the international search report:

05 May 2022 (05.05.2022)

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2021/052027

A. CLASSIFICATION OF SUBJECT MATTER		
INV. G06F3/01	A63F13/428	G06F3/04842
		A63B71/06
	G06T19/00	G06F3/04815
ADD.		
According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED		
Minimum documentation searched (classification system followed by classification symbols)		
G06F A63F A63B G06T		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)		
EPO-Internal, WPI Data		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2020/142475 A1 (PAEZ GABRIEL M [US] ET AL) 7 May 2020 (2020-05-07) paragraph [0013] - paragraph [0057]; figure 1 paragraph [0116] - paragraph [0136]; figure 5 -----	1-20, 92-96
X	US 2017/109936 A1 (POWDERLY JAMES M [US] ET AL) 20 April 2017 (2017-04-20) paragraph [0163] - paragraph [0164]; figure 18 paragraph [0217] - paragraph [0221] paragraph [0206] -----	1-20, 92-96
A	US 10 481 755 B1 (NGO KEVIN [US] ET AL) 19 November 2019 (2019-11-19) column 16, line 14 - column 18, line 57; figures 1,3,18 -----	1-20, 92-96
	-/--	
<input checked="" type="checkbox"/>	Further documents are listed in the continuation of Box C.	<input checked="" type="checkbox"/>
		See patent family annex.
* Special categories of cited documents :		
"A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family	
Date of the actual completion of the international search	Date of mailing of the international search report	
19 January 2022	22/03/2022	
Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer Tonet, Oliver	

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2021/052027

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2019/182355 A1 (CLEMENT MANUEL CHRISTIAN [US] ET AL) 13 June 2019 (2019-06-13) paragraph [0021] - paragraph [0045] -----	1-20, 92-96

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2021/052027

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.

2. As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.

3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims;; it is covered by claims Nos.:
1-20, 92-96

Remark on Protest

- The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-20, 92-96

preventing a user to interact with a user interface object in a shared three-dimensional environment if another user is already interacting with it

2. claims: 21-36, 97-101

displaying a three-dimensional environment from different viewpoints depending on detected movement of at least one of a user and an object

3. claims: 37-54, 102-106

displaying a computer-generated experience at different levels of immersion depending on biometric data

4. claims: 55-74, 107-111

displaying a physical environment with different computer-generated sensory adjustments depending on a detected user input

5. claims: 75-91, 112-116

displaying different virtual content replacing a portion of a three-dimensional environment depending on a detected movement of a user

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/US2021/052027
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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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			WO 2017192176 A1 09-11-2017
