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(12) **EUROPEAN PATENT APPLICATION**

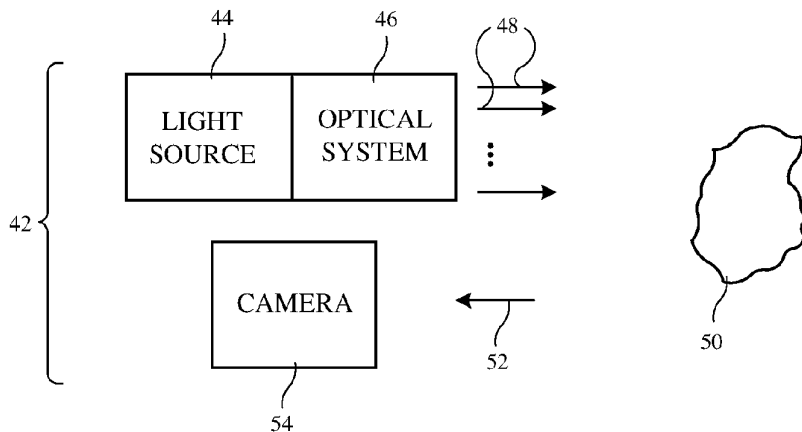
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- (51) International Patent Classification (IPC):  
**G02B 27/01 (2006.01) G02B 27/00 (2006.01)**  
**G06V 40/19 (2022.01)**
- (52) Cooperative Patent Classification (CPC):  
**G02B 27/0176; G02B 27/0093; G06V 40/19**

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| <p>(84) Designated Contracting States:<br/><b>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</b></p> <p>(30) Priority: <b>17.07.2018 US 201862699370 P</b><br/><b>06.02.2019 US 201916269336</b></p> <p>(62) Document number(s) of the earlier application(s) in accordance with Art. 76 EPC:<br/><b>19711194.1 / 3 797 330</b></p> | <p>(71) Applicant: <b>Apple Inc.</b><br/><b>Cupertino, CA 95014 (US)</b></p> <p>(72) Inventors:<br/>• <b>FRANKLIN, Jeremy, C.</b><br/><b>Cupertino, California, 95014 (US)</b><br/>• <b>NESS, Trevor, J.</b><br/><b>Cupertino, California, 95014 (US)</b></p> <p>(74) Representative: <b>Simmons &amp; Simmons</b><br/><b>City Point</b><br/><b>One Ropemaker Street</b><br/><b>London EC2Y 9SS (GB)</b></p> |
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(54) **ADJUSTABLE ELECTRONIC DEVICE SYSTEM WITH FACIAL MAPPING**

(57) A head-mounted device may have a display for displaying image content. Head-mounted support structures in the device may be used to support the display. The head-mounted device or external equipment may include a three-dimensional image sensor. The three-dimensional image sensor may capture a three-dimensional image of a user's face. Control circuitry may analyze the three-dimensional image to identify which of multiple versions of a customizing face-fit module should be used

in the electronic device to fit the device to the user's face. An appropriate face-fit module may be identified based on facial features such as facial size and the shapes of a user's forehead, nose, and cheeks. After identifying which version of the face-fit module is to be used by the user, that version of the face-fit module may be coupled to a non-custom portion of a main unit for the head-mounted device using magnets or other coupling structures.



**FIG. 3**

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**PARTIAL EUROPEAN SEARCH REPORT**

Application Number

under Rule 62a and/or 63 of the European Patent Convention.  
This report shall be considered, for the purposes of subsequent proceedings, as the European search report

**EP 23 18 2601**

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	<p>US 2013/318776 A1 (JACOBS JOEL [US] ET AL) 5 December 2013 (2013-12-05) * par. 20 and 62; par. 47; par. 20; par. 47 and 99; par. 48 and 39; par. 22; par. 99, fig. 16, par. 112; par. 59 - 61; par. 46 and 53 - 54 and fig. 7; par. 46; par. 53 - 54; fig. 7 *</p> <p style="text-align: center;">-----</p>	1-7	<p>INV. G02B27/01 G02B27/00 G06V40/19</p>
			<p>TECHNICAL FIELDS SEARCHED (IPC)</p>
			G02B
INCOMPLETE SEARCH			
<p>The Search Division considers that the present application, or one or more of its claims, does/do not comply with the EPC so that only a partial search (R.62a, 63) has been carried out.</p> <p>Claims searched completely :</p> <p>Claims searched incompletely :</p> <p>Claims not searched :</p> <p>Reason for the limitation of the search:</p> <p><b>see sheet C</b></p>			
Place of search		Date of completion of the search	Examiner
Munich		12 December 2023	Thieme, Markus
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons</p> <p>..... &amp; : member of the same patent family, corresponding document</p>			

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**INCOMPLETE SEARCH  
SHEET C**

Application Number

**EP 23 18 2601**

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**Claim(s) completely searchable:**

1-7

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**Claim(s) not searched:**

8-13

**Reason for the limitation of the search:**

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**Multiple independent claims; claims 1 - 7 search according to the response following the invitation under Rule 62a(1) EPC.**

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**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

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5 This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
The members are as contained in the European Patent Office EDP file on  
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12-12-2023

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2013318776 A1	05-12-2013	US 2013318776 A1	05-12-2013
		US 2015362992 A1	17-12-2015
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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82