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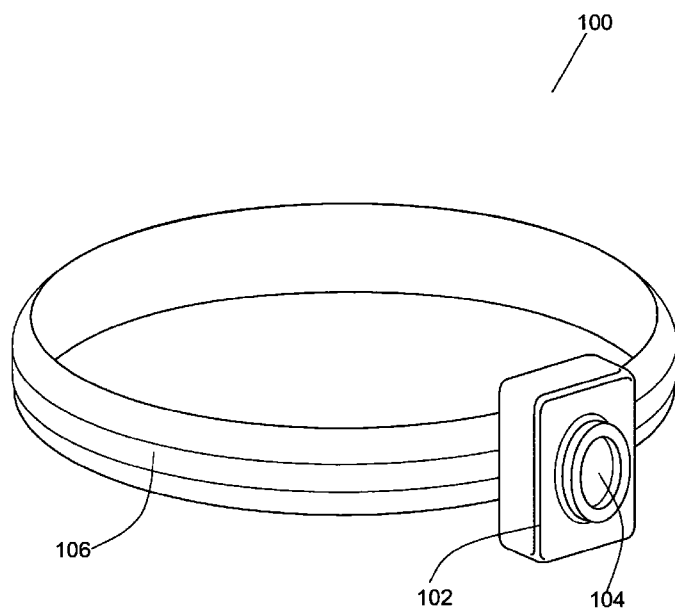


Figure 1

(57) Abstract: According to the invention there is pro-
vided an object detection device for use by a visually im-
paired individual comprising a time of flight camera and
an associated tactile feedback unit, whereby, the time of
flight camera receives an image within a viewing range
of the time of flight camera; the object detection device
produces object detection information regarding: a pres-
ence of one or more objects detected in the image, an ap-
proximate size for each detected object, and, an approxi-
mate distance to each detected object; at least a portion
of the object detection information is transmitted from
the time of flight camera to the tactile feedback unit; and,
the tactile feedback unit relays the transmitted object de-
tection information to the visually impaired individual.
The advantage is that a visually impaired individual will
be provided with more object detection information than
with any other known device. In particular, the time of
flight camera allows distance information to be provided
to the visually impaired individual, thus allowing the vi-
sually impaired individual to build a realistic three-di-
mensional representation of the surrounding environ-
ment. This greatly increases the visually impaired indi-
vidual's ability to safely negotiate any obstacles and/or
objects in the surrounding environment. Moreover, the
visually impaired individual can interact in a more full

and immersive manner than was previously possible with all other known types of prior art devices.

INTERNATIONAL SEARCH REPORT

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PCT/EP2010/058025

A. CLASSIFICATION OF SUBJECT MATTER

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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)

G09B

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 practical, 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	WO 2006/021916 A1 (PHILIPS INTELLECTUAL PROPERTY [DE]; KONINKL PHILIPS ELECTRONICS NV [NL] 2 March 2006 (2006-03-02) * abstract page 2, line 16 - line 22 page 4, line 1 - line 5 page 5, line 6 - page 8, line 25 -----	1,3-11, 13-19, 21-26
X	US 6 430 450 B1 (BACH-Y-RITA PAUL [US] ET AL) 6 August 2002 (2002-08-06) * abstract column 1, line 55 - column 2, line 67 column 3, line 55 - column 9, line 23 ----- -/--	1,3-11, 13-19, 21-26



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"P" document published prior to the international filing date but later than the priority date claimed

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 942 970 A (NORMAN JIM [GB]) 24 August 1999 (1999-08-24) the whole document -----	1,3-11, 13-19, 21-26
X	DE 42 41 937 A1 (MATSCHULAT GUNNAR [DE]) 16 June 1994 (1994-06-16) * abstract column 1, line 1 - column 6, line 6 & DE 42 41 937 C2 (MATSCHULAT GUNNAR [DE]) 8 February 2001 (2001-02-08) column 8, line 1 - line 8 -----	1-26

INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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