### **PATENT COOPERATION TREATY**

From the INTERNATIONAL SEARCHING AUTHORITY

To:							PCT		
see form PCT/ISA/220					WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43 <i>bis</i> .1)				
					Date of mailing (day/month/yea	=	form PCT/ISA/210 (second sh	neet)	
Applicant's or agent's file reference see form PCT/ISA/220					FOR FURTHER ACTION See paragraph 2 below				
International application No. PCT/IT2015/000300			International filing date (day/month/year) 09.12.2015			Priority date (day/month/year) 09.12.2014			
International Patent Classification (IPC) or both national classification and IPC INV. F24J2/06 F24J2/08 F24J2/10 F24J2/12 F24J2/18 F24J2/26 G02B5/08 G02B5/22									
Applicant LAVANGA VITO									
1.	This opinion contains indications relating to the following items:								
	☑ Box No. I	Basis of the op	inion						
	☐ Box No. II Priority								
	☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability							ability	
	☐ Box No. IV Lack of unity of invention								
	Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step and industr applicability; citations and explanations supporting such statement							industrial	
	Box No. VI Certain documents cited								
☐ Box No. VII Certain defects in the international app				• • •					
	☐ Box No. VIII Certain observations on the international application								
2.	2. FURTHER ACTION								
	If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notifed the International Bureau under Rule 66.1 bis(b) that written opinions of this International Searching Authority will not be so considered.							ly where	
If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 mo from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.							f 3 months		
For further options, see Form PCT/ISA/220.									
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	<b>9</b> ) P.B. 5818	Patent Office Patentlaan 2 IV Rijswijk - Pays	se	ee form CT/ISA/21		Beltzı	ung, Francis	CHICAPE BIT FATSON, C	
		0 340 - 2040 0 340 - 3016				Teleph	one No. +31 70 340-0	Toodone source on topology	

## WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/IT2015/000300

_	Box	No. I	Basis of the opinion					
1.	With regard to the <b>language</b> , this opinion has been established on the basis of:							
		the in	ternational application in the language in which it was filed.					
			slation of the international application into , which is the language of a translation furnished for the ses of international search (Rules 12.3(a) and 23.1 (b)).					
2.			opinion has been established taking into account the <b>rectification of an obvious mistake</b> authorized notified to this Authority under Rule 91 (Rule 43 <i>bis</i> .1(a))					
3.			regard to any <b>nucleotide and/or amino acid sequence</b> disclosed in the international application, this on has been established on the basis of a sequence listing:					
		а. 🗆	forming part of the international application as filed:					
			☐ in the form of an Annex C/ST.25 text file.					
			□ on paper or in the form of an image file.					
		b. 🗆	furnished together with the international application under PCT Rule 13 <i>ter</i> .1(a) for the purposes of international search only in the form of an Annex C/ST.25 text file.					
		c. 🗆	furnished subsequent to the international filing date for the purposes of international search only:					
			☐ in the form of an Annex C/ST.25 text file (Rule 13 <i>ter</i> .1(a)).					
			□ on paper or in the form of an image file (Rule 13 <i>ter</i> .1(b) and Administrative Instructions, Section 713).					
4.		the re	dition, in the case that more than one version or copy of a sequence listing has been filed or furnished, quired statements that the information in the subsequent or additional copies is identical to that application as filed or does not go beyond the application as filed, as appropriate, were hed.					
5.	Add	litional	comments:					

Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N) Yes: Claims <u>2, 4-14</u>

No: Claims 1, 3

Inventive step (IS) Yes: Claims

No: Claims <u>1-14</u>

Industrial applicability (IA) Yes: Claims <u>1-14</u>

No: Claims

2. Citations and explanations

see separate sheet

#### Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

#### Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

- 1 Reference is made to the following documents:
  - D1 US 5 578 140 A (YOGEV AMNON [IL] ET AL) 26 November 1996 (1996-11-26)
  - D2 US 2014/137941 A1 (ORSLEY TIMOTHY JAMES [US]) 22 May 2014 (2014-05-22)
  - D3 US 2011/174359 A1 (GOEI ESMOND [US] ET AL) 21 July 2011 (2011-07-21)
  - D4 US 2008/276929 A1 (GERWING DAVE [CA] ET AL) 13 November 2008 (2008-11-13)
- The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims 1, 3 is not new in the sense of Article 33 (2) PCT.

The document D1 discloses all technical features of method claim 1 and device claim 3 (see column 4, line 54 - line 57; column 7, line 11 - column 9, line 61; claims 8, 37-38; figures 2-5, the references in parentheses applying to this document):

Method to selectively pick up one or more frequencies of an electromagnetic radiation, including the following steps:

- . to pick up said electromagnetic radiation;
- . to induce the reflection of said one or more frequencies using a reflector (12, 22, 32, 34) coloured by colours corresponding to said one or more frequencies (column 4, line 54 line 57);
- . to receive said one or more frequencies reflected by said coloured reflector;
- . to convey said one or more received frequencies towards a user device.

Device fitted to selectively pick up one or more frequencies of an electromagnetic radiation, including:

- the first means (12, 22, 32), fitted to reflect said one or more frequencies and to absorb said residual frequencies, so as to produce heat energy, said first means (12, 22, 32) being coloured with one or more colours corresponding to said frequencies to be reflected;
- second means (11, 21, 31) fitted to receive said one or more frequencies reflected by said first means (12, 22, 32) and to transmit them to a user device.

In addition, the subject-matter of claim 1 is also known from D2 (paragraph [0066] - paragraph [0088]; figures 4,5).

Therefore, the subject-matter of claims 1, 3 is not new.

- Dependent claims 2, 4-14 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of inventive step, because in claim 2, resp. in claims 4-14, slight constructional changes in the method of claim 1, resp. in the device of claim 3, are defined which come within the scope of the customary practice followed by persons skilled in the art, especially as the advantages thus achieved can readily be foreseen:
  - for claims 2, 4-7, 9, see for instance D3 (paragraph [0036] paragraph [0057]; figures 1A-6);
  - for claim 8, see for instance D4 (paragraph [0036] paragraph [0041]; figures 1A-8).
- The subject-matter of claims 1-14 is deemed to be industrially applicable (Article 33(4) PCT).

#### Re Item VII

Certain defects in the international application

# WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (SEPARATE SHEET)

PCT/IT2015/000300

Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the document D1 is not mentioned in the description, nor is this document identified therein.