

PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY

To: 610213 China (No. 846 South Tianfu Road) Tianfu Innovation Center, Chengdu, Sichuan METIS IP (CHENGDU) LLC

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Applicant's or agent's file reference 206330081W00	Date of mailing <i>(day/month/year)</i> 12 December 2018	
FOR FURTHER ACTION See paragraph 2 below		
International application No. PCT/CN2018/107035	International filing date <i>(day/month/year)</i> 21 September 2018	Priority date <i>(day/month/year)</i> 22 September 2017
International Patent Classification (IPC) or both national classification and IPC H04N 5/235(2006.01)i; H04N 5/243(2006.01)i		
Applicant ZHEJIANG DAHUA TECHNOLOGY CO., LTD.		

1. This opinion contains indications relating to the following items:

- Box No. I Basis of the opinion
- Box No. II Priority
- Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- 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 industrial applicability; citations and explanations supporting such statement
- Box No. VI Certain documents cited
- Box No. VII Certain defects in the international application
- Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will 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 notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

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 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA/ National Intellectual Property Administration, PRC China 6, Xitucheng Rd., Jimen Bridge, Haidian District, Beijing 100088	Date of completion of this opinion 05 December 2018	Authorized officer HUANG,Zhi
Facsimile No. (86—10) 62019451	Telephone No. 86-(010)-62089373	

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Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of:
 - the international application in the language in which it was filed.
 - a translation of the international application into _____ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).
2. This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a)).
3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing:
 - a. 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*ter*.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*ter*.1(a)).
 - on paper or in the form of an image file (Rule 13*ter*.1(b) and Administrative Instructions, Section 713).
4. In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that forming part of the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
5. Additional comments:

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Box No. II Priority

1. The validity of the priority claim has not been considered because the International Searching Authority does not have in its possession a copy of the earlier application whose priority has been claimed or, where required, a translation of that earlier application. This opinion has nevertheless been established on the assumption that the relevant date (Rules 43*bis*.1 and 64.1) is the claimed priority date.
2. This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43*bis*.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.
3. Additional observations, if necessary:
 - [1] The priority claim has been found valid.

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

1. Statement

Novelty (N)	Claims	<u>1-31</u>	YES
	Claims	<u>None</u>	NO
Inventive step (IS)	Claims	<u>None</u>	YES
	Claims	<u>1-31</u>	NO
Industrial applicability (IA)	Claims	<u>1-31</u>	YES
	Claims	<u>None</u>	NO

2. Citations and explanations :

[1] D1:CN106488201A

[2] D2: CN103458190A

[3] D1 is the prior art closest to the present invention, which discloses an image signal processing system and method(description, paragraphs 0020 to 0032, 0130 to 0162, 0190 to 0198 and figures 1 to 10). The system includes a first imaging unit, a second image unit and a signal combination unit. The first imaging unit is used to obtain a first image signal including color information by sensing visible light on the imaging area. The second imaging unit is used to obtain a second image signal including luminance information by sensing at least infrared light on the imaging area. And the signal combination unit is used to combine the first and second image signal to generate a combination image with the color information and luminance information. The system also includes an infrared light unit, a white balance unit, a noise reduction unit, a color correction unit and a contrast unit.

[4] D2 discloses an imaging method(description, paragraphs 0119 to 0122), which includes: S22, obtaining a target image; S23, obtaining the shooting parameters of the target image, wherein, the shooting parameters include an f-number, a shutter speed, an ISO; and S24, setting the shooting parameters of the target image as the current shooting parameters.

[5] Claim 1 differs from D1 in: an image capture device obtains both the color image data and luminance image data, at least one storage device including a set of instructions, at least one processor in communication with the at least one storage device and executes the instructions. Claim 11 differs from D1 in: the method implemented on a computing device having at least on storage device and at least on processor, an image capture device obtains both the color image data and luminance image data. Claim 21 differs from D1 in: an image capture device obtains both the color image data and luminance image data. Claim 31 differs from D1 in: a non-transitory computer readable medium comprising executable instructions. Therefore, claims 1, 11, 21 and 31 are new in the sense of PCT Article 33(2).

[6] Thus the corresponding dependent claims 2-10, 12-20, 22-30 are also new in the sense of PCT Article 33(2).

[7] However, above different features are common knowledge in the art, therefore, claims 1, 11, 21 and 31 do not meet the criteria set out in PCT Article 33(3).

[8] The additional features of claims 2, 12 and 22 are also disclosed in D1, therefore, claims 2, 12 and 22 do not meet the criteria set out in PCT Article 33(3).

[9] Part of the additional features of claims 3-6, 13-16, 23-26 are disclosed in D2, the rest of the additional features of claims 3-6, 13-16 and 23-26 are common knowledge in the art, therefore, claims 3-6, 13-16 and 23-26 do not meet the criteria set out in PCT Article 33(3).

[10] The additional features of claims 7-10, 17-20 and 27-30 are common knowledge in the art, therefore, claims 7-10, 17-20 and 27-30 do not meet the criteria set out in PCT Article 33(3).

[11] Claims 1-31 have the industrial applicability and meet the requirements of PCT Article 33(4).

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Box No. VII Certain defects in the international application

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

- [1] Claims 5-8, 15-18, 25-28 are multiple dependent claims themselves, and they cite the previous multiple dependent claim(s), so claims 5-8, 15-18, 25-28 do not meet the criteria set out in PCT Rule 6.4 (a).