

PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

To:

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Date of mailing (<i>day/month/year</i>) 05 December 2019 (05.12.2019)		FOR FURTHER ACTION See paragraph 2 below	
Applicant's or agent's file reference 85717728			
International application No. PCT/US 2019/029983	International filing date (<i>day/month/year</i>) 30 April 2019 (30.04.2019)	Priority date (<i>day/month/year</i>)	
International Patent Classification (IPC) or both national classification and IPC <i>B41F 33/00 (2006.01)</i> <i>B41L 39/00 (2006.01)</i> <i>B41L 27/04 (2006.01)</i> <i>B41F 31/02 (2006.01)</i> <i>G03G 15/08 (2006.01)</i> <i>B29C 64/321 (2017.01)</i>			
Applicant HEWLETT-PACKARD DEVELOPMENT COMPANY, L.P.			

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 43*bis*.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 66.1*bis*(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/RU: Federal Institute of Industrial Property, Berezhkovskaya nab., 30-1, Moscow, G-59, GSP-3, Russia, 125993 Facsimile No: (8-495) 531-63-18, (8-499) 243-33-37	Date of completion of this opinion 09 October 2019 (09.10.2019)	Authorized officer E. Boldina Telephone No. 8(495) 531-64-81
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Box No. I Basis of this 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 filed or furnished:
 - 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 in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
5. Additional comments:

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International application No.

PCT/US 2019/029983

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	1-15	YES
	Claims		NO
Inventive step (IS)	Claims	1-15	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-15	YES
	Claims		NO

2. Citations and explanations:

US 2018/0124280 A1 – D1
US 2008/0181713 A1– D2

D1, the closest prior art for the inventions according to independent claims 1 and 9, discloses the non-transitory computer-readable data storage medium ([0012], [0022], [0023], [0028], [0038], [0039], [0056], [0057], fig. 1-5) storing a program code executable by a printing device to perform processing steps, comprising detecting a cartridge with a colorant inside; and a printing device ([0001], [0009], [0022], [0028], fig. 1) comprising a colorant supply device; a print engine to print using the colorant supply; a display (a feature immanent to most printers); a door permitting access to the colorant supply.

The difference between the invention according to independent claim 1 and D1 is that the non-transitory computer-readable data storage media detects that the door of the printing device was open.

The difference between the invention according to independent claims 1, 9 and D1 is that the printing device comprising hardware logic to, responsive to the door being opened, display on the display current status information of the colorant supply.

Therefore, claims 1-14 are novel.

D2, the closest prior art for the invention according to independent claim 15, discloses a method ([0001], [0002], [0052]) comprising detecting by the printing device that a door of the printing device has been opened.

The difference between the invention according to independent claim 15 and D2 is that the door covers access to a colorant supply within the printing device and that

in response to detecting that the door of the printing device has been opened, displaying on a display of the printing device current status information of a colorant supply within the printing device.

Therefore, claim 15 is novel.

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of V:

The specified difference showing that there is the hardware logic available responsive to the door being opened and displaying the current status of the colorant supply on the display is not known from the prior art and is not obvious for a person skilled in the art in order to promptly and easily determine whether or not colorants of the printing devices need to be replenished.

Therefore, claims 1-15 involve an inventive step.

Claims 1-15 are industrially applicable.