

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization

International Bureau

(43) International Publication Date
11 May 2018 (11.05.2018)



(10) International Publication Number
WO 2018/085523 A3

(51) International Patent Classification:

G06K 19/067 (2006.01)

(21) International Application Number:

PCT/US2017/059695

(22) International Filing Date:

02 November 2017 (02.11.2017)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

62/416,458 02 November 2016 (02.11.2016) US

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

(88) Date of publication of the international search report:

14 June 2018 (14.06.2018)

(54) Title: ACTIVE CARD COOLING IN A CARD PROCESSING MACHINE

(57) Abstract: Methods and systems of actively cooling a card while the card is within a card processing machine are described. One or more cooling stations are provided within the card processing machine to actively cool the card prior to performing a processing operation, during a processing operation, and/or after a processing operation on the card in order to reduce a temperature of the surface of the card.



WO 2018/085523 A3

A. CLASSIFICATION OF SUBJECT MATTER**G06K 19/067(2006.01)i**

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)

G06K 19/067; B29C 65/18; B42D 15/10; B41M 5/00; B41J 17/00; B30B 15/34; B32B 31/20; B41J 2/01

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) & Keywords: plastic, card, cooling, reduce, temperature, retransfer

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2004-0066441 A1 (ROBERT JONES et al.) 08 April 2004 See paragraphs [0067], [0072], [0123]-[0126], [0142], [0168]; and figures 5, 14.	1-3, 5-6, 13, 15
Y		4, 7-12, 14
Y	US 2004-0207714 A1 (TOSHINORI TAKAHASHI et al.) 21 October 2004 See paragraph [0064]; and figure 8.	4, 7-12, 14
A	JP 2003-159753 A (SONY CORP.) 03 June 2003 See claims 1-4.	1-15
A	KR 10-1009307 B1 (MITSUBISHI PLASTICS, INC.) 18 January 2011 See paragraphs [0093]-[0104]; and figures 1-3.	1-15
A	US 6484780 B2 (KEITH R. ASHLEY et al.) 26 November 2002 See figures 1-3.	1-15

 Further documents are listed in the continuation of Box C. See patent family annex.

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"&" document member of the same patent family

Date of the actual completion of the international search

15 May 2018 (15.05.2018)

Date of mailing of the international search report

15 May 2018 (15.05.2018)

Name and mailing address of the ISA/KR

International Application Division

Korean Intellectual Property Office

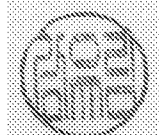
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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2017/059695

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