



- (51) **International Patent Classification:**
H04B 5/02 (2006.01) G06F 9/44 (2006.01)
G06Q 20/00 (2006.01)
- (21) **International Application Number:**
PCT/US2011/031293
- (22) **International Filing Date:**
5 April 2011 (05.04.2011)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
61/321,110 5 April 2010 (05.04.2010) US
- (71) **Applicant (for all designated States except US):** VIV-OTECH, INC. [US/US]; 451 El Camino Real, 2nd Floor, Santa Clara, CA 95050 (US).
- (72) **Inventors; and**
- (75) **Inventors/Applicants (for US only):** KAHN, Mohammad [US/US]; 2238 Bentley Ridge Drive, San Jose, CA 95138 (US). MARITN, Phillippe [FR/US]; 357 Briar Ridge Drive, San Jose, CA 95123 (US). RAYNON, Jean-Christophe [FR/US]; 1686 Liverpool Avenue, San Jose, CA 95124 (US). CLARK, Aaron [US/US]; 58. El Camino Real #101, San Mateo, CA 94401 (US). VI-JAYSHANKAR, Roshan [IN/US]; 2820 Fargher Drive, Santa Clara, CA 95051 (US).
- (74) **Agent:** HUNT, Gregory, A.; Jenkins Wilson, Taylor & Hunt, P.A., Suite 1200, University Tower, 3100 Tower Boulevard, Durham, NC 27707 (US).
- (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, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, 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, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, 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, 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))

[Continued on next page]

(54) **Title:** SYSTEMS, METHODS, AND COMPUTER READABLE MEDIA FOR PERFORMING MULTIPLE TRANSACTIONS THROUGH A SINGLE NEAR FIELD COMMUNICATION (NFC) TAP

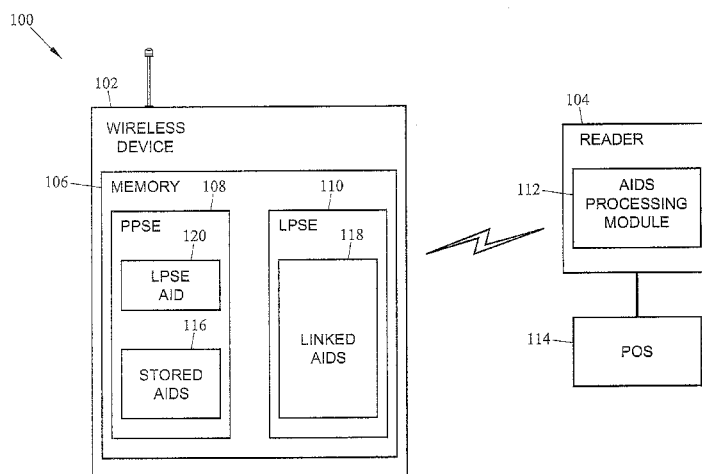


FIG. 1

(57) **Abstract:** The subject matter described herein includes a method of performing multiple transactions through a single near field communication (NFC) tap. The method includes storing, at a linking application in a wireless device, a plurality of application identifiers (AIDs) that identify a plurality of applications to be processed in a single NFC tap. The method can further include detecting, by a wireless device reader, a linking application AID in the wireless device that identifies the linking application upon interfacing the wireless device with the wireless device reader through the single NFC tap. The method can include accessing, by the wireless device reader, the plurality of AIDs using the linking application. The method can further include processing the plurality of applications associated with the plurality of AIDs through the single NFC tap.

WO 2011/127084 A3

(88) Date of publication of the international search report:
29 December 2011

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2011/031293**A. CLASSIFICATION OF SUBJECT MATTER***H04B 5/02(2006.01)i, G06Q 20/00(2006.01)i, G06F 9/44(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)

IPC 9: H04B; G06F; G06K; G06Q

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:mobile, payment, identifier, RF, tag, NFC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2006-0002610 A1 (SUOMELA et al.) 05 January 2006 See the abstract and claims 1, 10.	1-21
A	KR 10-2007-0073718 A (LG TELECOM, LTD.) 10 July 2007 See the abstract and pages 5-6.	1-21
A	KR 10-2009-0029323 A (YEO, HO RYONG) 23 March 2009 See the abstract and claim 1	1-21

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

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

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

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

21 OCTOBER 2011 (21.10.2011)

Date of mailing of the international search report

24 OCTOBER 2011 (24.10.2011)

Name and mailing address of the ISA/KR

Korean Intellectual Property Office
Government Complex-Daejeon, 189 Cheongsu-ro,
Seo-gu, Daejeon 302-701, Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

SOHN, Hyun-Woong

Telephone No. 82-42-481-5973



INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2011/031293

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2006-0002610 A1	05.01.2006	CN 100557620 C	04.11.2009
		CN 1957359 A	02.05.2007
		EP 1763818 A1	21.03.2007
		KR 10-0876311 B1	31.12.2008
		KR 10-2007-0024683 A	02.03.2007
		US 7304585 B2	04.12.2007
		WO 2006-006001 A1	19.01.2006
KR 10-2007-0073718 A	10.07.2007	None	
KR 10-2009-0029323 A	23.03.2009	None	