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- (71) **Applicants:** **MASTER LOCK COMPANY** [US/US]; 137 West Forest Hill Avenue, Oak Creek, Wisconsin 53154 (US). **VARDR PTY. LTD.** [AU/AU]; 35 Upper Almora Street, Mosman, New South Wales 2088 (AU).
- (72) **Inventors:** **SMITH, Geoff**; 7 Panorama Place, Mt. Gravatt East, Queensland 4122 (AU). **FITZPATRICK, Matthew**; 35 Upper Almora Street, Mosman, New South Wales 2088 (AU). **CELINSKI, Tom**; 35 Upper Almora Street, Mosman, New South Wales 2088 (AU).
- (74) **Agents:** **REICHENBERGER, Karl, F.** et al.; Foley & Lardner LLP, 3000 K. Street N.W., Suite 600, Washington, District of Columbia 20007-5109 (US).
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Declarations under Rule 4.17:

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*

Published:

- *with international search report (Art. 21(3))*

[Continued on next page]

(54) **Title:** SYSTEMS AND METHODS FOR CONFIGURATION OF WIRELESS CAMERA

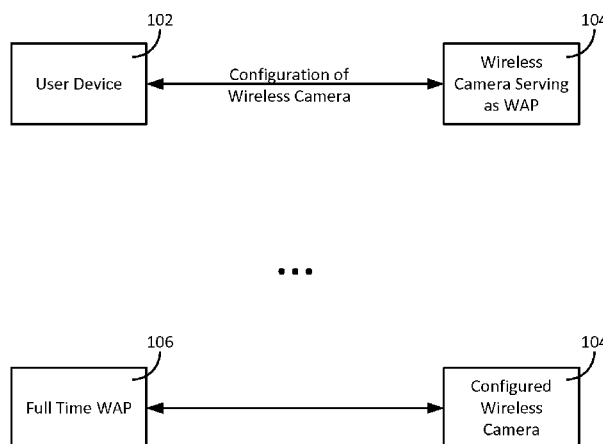


FIG. 1

(57) **Abstract:** Systems and methods for configuring a wireless camera to connect to a wireless access point are provided. The systems and methods include wirelessly connecting to a client device and transmitting an encryption key to the client device. The systems and methods also include receiving encrypted data from the client device and decrypting the data using the encryption key. The encrypted data may include an identifier and an access code. The systems and methods further include wirelessly connecting to the wireless access point using the decrypted data.



— *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))*

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31 December 2014

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2014/027863

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - H04L 9/00 (2014.01)

USPC - 726/1

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(8) - H04L 9/00, H04W 84/02, H04N 5/225, H04W 12/00, G06F 15/16 (2014.01)

USPC - 726/1, 348/207.11, 348/E05.024, 726/5

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

CPC - H04W12/04, H04L 63/06, H04L 41/0806 (2014.02)

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

PatBase, Orbit, Google Patents, Google Scholar, Google

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 20120240191 A1 (Hunsley et al) 20 September 2012 (20.09.2012) entire document	1-5, 12, 18-19
Y		6-11, 13-17
Y	US 20120233679 A1 (Shedrinsky) 13 September 2012 (13.09.2012) entire document	6-11, 13
Y	US 20120044354 A1 (Cheng et al) 23 February 2012 (23.02.2012) entire document	14-17

☐ Further documents are listed in the continuation of Box C.

* 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 another 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

08 September 2014

Date of mailing of the international search report

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Name and mailing address of the ISA/US

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Blaine R. Copenheaver

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2014/027863

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

See Extra Sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying additional fees, this Authority did not invite payment of additional fees.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
1-19

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2014/027863

Continuation of Box No. III:

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be examined, the appropriate additional examination fees must be paid.

Group I, claims 1-19, drawn to a computer-implemented method for configuring a wireless camera to connect to a wireless access point. Group II, claims 20-26, drawn to activating a wireless camera to serve as a temporary wireless access point.

The inventions listed as Groups I-II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group I invention: a computer-implemented method for configuring a wireless camera to connect to a wireless access point as claimed therein is not present in the invention of Group II. The special technical feature of the Group II invention: activating the wireless camera to serve as a temporary wireless access point; wirelessly connecting to the wireless camera as the temporary wireless access point via a client device; providing speech audio via a speaker of the wireless camera indicating that the access point mode is activated; broadcasting an SSID associated with the wireless camera; encrypting, at the client device, one or more identifiers and one or more access codes, wherein the one or more identifiers and the one or more access codes are associated with one or more wireless access points; and receiving a request from a client device to connect to the wireless camera as claimed therein is not present in the invention of Group I.

Groups I and II lack unity of invention because even though the inventions of these groups require the technical feature of wirelessly connecting to a client device; transmitting an encryption key to the client device, wherein the encryption key is uniquely associated with the wireless camera; receiving encrypted data from the client device wherein the encrypted data comprises an identifier and an access code; decrypting, using a processing circuit of the wireless camera and the encryption key, the encrypted data; and wirelessly connecting to the wireless access point using the decrypted data, this technical feature is not a special technical feature as it does not make a contribution over the prior art. Specifically, US 2012/0240191 A1 (HUSNEY et al) 20 September 2012 (20.09.2012) teaches wirelessly connecting to a client device (a security camera using Wi-Fi can be installed, powered up, and joined to a network using an intermediary such as a nearfield communication-enabled cell phone or PDA, [0019]); transmitting an encryption key to the client device, wherein the encryption key is uniquely associated with the wireless camera (At 201, a joining device [wireless camera] such as 101 of FIG. 1 establishes a nearfield connection to an intermediary device such as cellular telephone 104 [client device]. The joining device sends identifying information to the intermediary device at 202, such as a MAC address or other unique identifier, or a shared secret such as a PIN number or key [encryption key], [0027]); receiving encrypted data from the client device wherein the encrypted data comprises an identifier and an access code (the wireless access point returns network information such as a wireless network encryption key or other information [interpreted as including an identifier and an access code] back to the joining device via the intermediary device [client device] to facilitate establishing a secure connection between the joining device and the wireless network access point, [0030]); decrypting, using a processing circuit of the wireless camera and the encryption key, the encrypted data and wirelessly connecting to the wireless access point using the decrypted data (the wireless access point returns network information such as a wireless network encryption key or other information back to the joining device [camera] via the intermediary device [client device] to facilitate establishing a secure connection between the joining device and the wireless network access point, [0030]; [therefore it is interpreted that the camera performs decryption using the encryption key in order to connect with the WAP]).

Since none of the special technical features of the Group I or II inventions are found in more than one of the inventions, unity of invention is lacking.