

Titre : Printing from a cellular phone.

Abrégé :

A mobile printing system for printing a document from received electronic print data is provided, the system comprising a mobile cellular device in communication with a cellular network and in communication with a printer and including a network module and a removable storage media, the network module identifying the mobile cellular device to the cellular network as an electronic print data storage device for receipt of electronic print data; the electronic print data being stored on the storage media, said electronic print data being converted to an electronic print document by the mobile cellular device for transmission and printing by the printer.



COMBINATION CELLULAR AND PRINTER DEVICE

BACKGROUND OF THE INVENTION

The present invention is broadly concerned with improvements in imaging devices in communication with cellular phones.

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Cellular devices are increasing in popularity and functionality and are becoming a central part of many electronic systems in part because of the expanding communication protocols available to both printers and cellular devices, e.g., WI-FI, Bluetooth, 3G and 4G. However, despite the growth of cellular devices the ability to print from these devices has been limited. Generally,

- 10 both cellular devices and printers have limited computer processor abilities with smaller processors and less memory. Traditional printing systems involve transmitting content to a printer from an electronic device in a printer-friendly format such as postscript, PCL or other print ready format. Converting the material to a printer friendly format takes a sufficient processor capability which Is not traditionally provided on a cellular phone. The present invention is
- 15 designed to overcome these disadvantages and limitations.

SUMMARY OF THE INVENTION

The present Invention provides Improvements in certain areas of printing from cellular devices. A mobile printing system for printing a document from received electronic print data, said system

- 20 comprising a mobile cellular device in communication with a cellular network said mobile cellular device In communication with a printer and including a network module and a storage media, said network module identifying said mobile cellular device to the cellular network as an electronic print data storage device for receipt of electronic print data; and said electronic print data being stored on said storage media, wherein said electronic print data is converted to an
- 25 electronic print document by said mobile cellular device for transmission and printing by said printer. The cellular device can be a standalone device, embedded into a cellular phone, ATM machine, ticketing machine or embedded into a printer. The cellular device may allow for communication with the printer device via a wired connection such as a USB port or cable or may be connected wirelessly using Bluetooth or WI-FI.

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Various objects and advantages of the present Invention will become apparent from the following description taken in conjunction with the accompanying drawings wherein are set forth, by way of illustration and example, certain embodiments of this invention.

BRIEF DESCRIPTION OF THE DRAWINGS

The drawings constitute a part of this specification, include exemplary embodiments of the present invention, and illustrate various objects and features thereof. This is achieved by the features of the independent claims.

FIG. 1 illustrates the functional components of the printing device according to the present invention.

FiG. 2 illustrates a logical implementation of the access control to the printer by the mobile printing device depending on the configuration made by the operator/user.

FIG. 3 is a flow chart diagram that represents the function of adding sources (numbers) of data, to access control list that allows the filtering of electronic data to the printer.

FIG. 4 A illustrates a flow chart presentation of how the mobile printing device relays status or error messages from a printer to a user either by displaying it or sending a status sms.

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DETAILED DESCRIPTION OF THE INVENTION

As required, detailed embodiments of the present invention are disclosed herein; however, it is to be understood that the disclosed embodiments are merely exemplary of the invention, which may be embodied in various forms. Therefore, specific structural and functional details disclosed herein are not to be interpreted as limiting, but merely as a basis for the claims and as a representative basis for teaching one skilled in the art to variously employ the present invention In virtually any appropriately detailed structure.

Referring to the drawings in more detail, the fig.1 generally designates an embodiment of the combination cellular printing device with a GSM module (1), an SD card (2), a universal serial port
(USB) (3), wireless antenna (Bluetooth) (4), processor (5), retractable tray (SIM card holder) (6), display (7), input device (8), cellular antenna (9), a power source (10) and memory storage (11). The system provides a user interface for configuration of the present system. The user has a choice of creating an (acl)access control list Fig 3. Which would be useful for direct access to printing (200). A cellular signal containing pre-processed print data is received by the cellular device and transmitted through the GSM Module for retrievable storage as pre-processed print data. When a connection is desired, the system will receive a status flag from the carrier via push technology. Alternatively, the user can operate the cellular device in accordance with the interface, for conversion of the pre-processed print data upon the receipt of the alert, processing the received print data which is then retrievably stored within the storage media of the cellular

device including any storage media. Upon connection to the configured printer, the processed print data can be transmitted to the printing device. Configuration may be addressed by user of the input and output devices associated with the cellular device. (300) Fig.2 shows the process of determining the access to the printer. (301)The device checks if the users' number is included in the (acl) access control list for direct processing, if not it prompts the user for permission to process print job.

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The GSM module (1) is a standard celiuiar communications module which may include GSM, EDGE, GPRS or other known cellular protocols, although preferably the present invention would use GSM with a SIM card containing the user identity and contact records. The SIM identifies the cellular device on the network in order to allow the GSM module to communicate with cellular network service providers. The GSM is used for identify the cellular device to the cellular network and for transmission from the cellular device to the printer device and for receipt of cellular traffic to the cellular device including notifications, message and other electronic content including MMS/SMS messages. In addition, the SIM may be easily removed and replaced if a different cellular network service provider is desired. Optionally, the SIM may also retain cellular carrier network data specific to the cellular network carrier for configuration of the cellular device upon cellular carrier cellular network.

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As illustrated in Fig. 1, an SD card or other storage media can be utilized for the retrievable storage of electronic data in the form of documents which can easily be retrieved from the storage media. Preferably the electronic data would be in the form of printer friendly documents. In addition, the storage media will allow for easy enhancement of the storage capacity of the cellular device, for example, file storage before processing by the processor 5. In an alternative embodiment the storage media may be utilized for retrievable storage of print data for printing by the printing device. In addition, log files may be written to the storage 25 media for the purposes of debugging and analyzing the activities of the device In addition Fig.1 illustrates a communication port in the form of a universal serial bus (USB) although other communication ports known in the art could be utilized for electronic communication between the cellular device and the printer device. Alternatively, the cellular device may be able to communicate wirelessly with the printing device using a variety of 30 known wireless communication protocols including but not limited to infrared, Bluetooth,

IEEE 802.11 or other RF protocols depending on the configured printing device.

The processor or micro controller will process the computer code for accepting the document data, converting it to a printer ready format and transmit the printer friendly document data to the printer upon selection by the operator (301). The processor may include an operating

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system or other Instructional system to allocate the resources of the cellular device and to process the print data into a form usable by the printer, i.e. a printer-friendly format. For example, the processor (5) may control the allocation and usage of the memory and processing time as well as the functional of the device as is understood by those within the relevant art.

A SIM Card holder (6) will be provided for connection between the cellular device and the print device (4), the holder having sufficient physical characteristics to retain a standard dimensioned SIM card in desired ambient conditions.

The cellular device will also include standard input and output devices, such as display screens (7) and keypads(8) for the configuration and interaction with system components and for processing and printing the print data for transmission to the connected printing device. Additionally, a standard cellular antenna (9) will be provided within the cellular device along with standard power sources. The system will generally work either through the carrier's cellular network or via a WI-Fi connection via the internet.

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in operation the cellular device may receive pre-processed print data from retrievable storage. Once received, the processor can convert the pre-processed print data to a printer-friendly format and store the processed data until the processed data is transmitted to a printer. Upon connection to a printer, the cellular device may transmit the processed data to the printer for rendering the content and printing from the associated printer. Fig 4 shows how the cellular device relays status or error messages (400) from a printer to a user either by displaying it or by sending an (sms) short message service. (401) checks for processed print data status display or sms notification. If the data is unable to be printed, the data may be retained on the cellular device and if the processed print data is able to be printed the cellular device may automatically delete the file or the file may be retained until manually deleted from the cellular device by the user.

In general, the cellular device will be able to accept documents from incoming cellular calls, however, the operator would be able to configure the system to reject certain numbers, therefore eliminating unnecessary storage or receipt of pre-processed print data.

30 The processed print data can be stored on a removable storage medium, which could be transferred for manual printing without the need for direct connection to the cellular device. Preferably the processed print data will be printed, upon connection to a printing device in a FIFO (memory management algorithm), although other memory algorithms could be utilized and selected during system configuration.

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In the present embodiment, the printing device may include most standard printing devices including, but not limited to a regular desktop printer, commercial printers, point of sale printers, receipt printers, vending machine printer, a ticket printer, parking meters, among others.

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In an alternative embodiment, the system could be directly connected to the printing device for receipt of pre-processed print data for direct printing, converting almost any printer to a cellular printing device. This embodiment may be particularly useful in a variety of applications including, but not limited to regular desktop printing application, commercial printing applications, point of sale printers, receipt printers, a vending machine printers, a ticket printer, an ATM machine or parking meters. In addition, the device could be Integrated with mobile money applications to print a receipt upon the payment or receipt of funds in association with a financial account.

15 Preferably the processed file is in printer-friendly format for printing by the associated printing device. Multiple printing devices may be associated with the cellular device and if so, the processor may wait until connection to the selected printing device or the operator may manually chose which printing device for which to process the pre-processed printing data. The memory associated with the device can include volatile and nonvolatile memory so that upon a loss of power, which does happen with cellular devices, the relevant data will be retained in memory.

The processing of the pre-processed print data may be based upon the instruction and configuration of software or source code or may be based upon the configuration of
dedicated hardware or a combination between software, standardized hardware and some specialized hardware. If embodied in hardware, the method of printing may be expressed or implemented as a circuit or state machine that employs any of the or a combination of a number of technologies. The technologies may include, but are not limited to, discreet logic circuits having logic gates for implementing various logic functions upon an application of one or more data signals, application specific integrated circuits having appropriate logic gates, programmable gate arrays, field programmable gate arrays or other components, such technologies being generally well known by those of ordinary skill in the art.
The block diagram of Fig.1 shows the architecture, functionality and operation of an implementation of the method of mobile printing in association with the present invention. If

embodied in software, each block may represent a module, segment or portion of code that comprises program instructions to implement the specified iogical function. The program instructions may be embedded in the form of source code that comprises human-readable statements written in a programming language or machine code that comprises numerical instructions recognizable by a suitable execution system such as a processor In a computer system or other system. The machine code may be converted from the source code, etc. If embodied In hardware, each block may represent a circuit or a number of interconnected circuits to implement the specified logical function.

While the block diagrams may show a specific order of execution, it will be appreciated that two or more steps in the diagrams that are shown executed in succession may be executed concurrently or with partial concurrence. The block diagrams are relatively self- explanatory and may be utilized by one of ordinary skill in the art to create software and/or hardware to carry out the various logical functions described and illustrated.

- Where the method of the present invention comprises software or code, it may be embodied
 in any computer-readable medium for use by or in connection with an instructions execution system such as, for example, a processor in a computer system or other system. In this sense, the method of the present invention may comprise, for example, statements including instructions and declarations that may be fetched from the computer-readable medium and executed by the instruction execution system. In the context of the present invention, a
 ²⁰ "computer-readable medium" may be any medium that can contain, store or otherwise
- maintains the method of the present invention for use by or in connection with an instruction execution system.

It will be appreciated that a variety of other equivalent modifications and substitutions may be made to the method of the present invention according to the concepts covered herein, depending upon the particular implementation, while still falling with the scope of any claims below.

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CLAIMS

What is claimed and desired to be secured by Letters Patent:

1. A mobile printing system for printing a document from received electronic print data, said system comprising: a mobile cellular device in communication with a cellular network; said

- 5 mobile cellular device in communication with a printer and including a network module and a storage media, said network module identifying said mobile cellular device to the cellular network as an electronic print data storage device for receipt of electronic print data; and said electronic print data being stored on said storage media, wherein said electronic print data is converted to an electronic print document by said mobile cellular device for transmission and
- 10 printing by said printer.

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2. The mobile printing system of claim 1 wherein said mobile cellular device is in direct communication with said printer.

3. The mobile printing system of claim 1 wherein said mobile cellular device is in wireless communication with said printer.

4. The mobile printing system of claim 1 wherein said mobile cellular device further comprises a plurality of SIM card each of which contain cellular data associated with a cellular provider, the mobile cellular device being operable with the plurality of SIM cards.

5. The mobile printing system of claim 1 wherein said mobile cellular device further includes an input device wherein said mobile cellular device converts said mobile print data to said electronic print document upon the receipt of a print request from said input device.

6. The mobile printing system of claim 1 further including a processor for receiving an input from said cellular network and in response to receipt of a signal from a cellular network device which meets the programmed criteria stored within the processor transmitting an alert to the cellular network device.

7. The mobile printing system of claim 1 wherein said mobile cellular device further includes an input device, an output device and an operator interface responsive to said input device and displayed by said output device wherein said mobile cellular device is configured by said lnput device to store electronic print data from a list of approved cellular network devices.

8. The mobile printing system of claim 7 wherein said operator interface provides a prompt on
said output device for accepting electronic print data from a mobile cellular device which does not match the list of approved cellular network devices.

9. The mobile printing system of claim 1 wherein said mobile cellular device further includes an input device, an output device and an operator interface responsive to said input device and

displayed by said output device wherein said operator interface includes a user interface access control and system control for configuring the mobile cellular device for receiving electronic print data.

10. The mobile printing system of claim 9 wherein sald operator interface is configured using the
input device for displaying printer status information associated with the printer on the output device.

11. The mobile printing system of claim 9 wherein said mobile cellular device is configured for selectively printing said electronic print document by said printer.

12. The mobile printing system of claim 9 wherein said mobile cellular device is configured forscheduling the printing of said electronic print document by said printer.

13. The mobile printing system of claim 1 wherein said electronic print data is retrievably stored on the storage media according to a first-in-first-out method.

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FUNCTIONAL DIAGRAM OF THE PRINTING DEVICE

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Fig. 1

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Fig 2

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Fig 3

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PATENT COOPERATION TREATY

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INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	FOR FURTHER	see Form PCT/ISA/220			
PCTKE2013/30	ACTION as well	as, where applicable, item 5 below			
International application No.	International filing date (day/month/year) (Earliest) Phonty Date (day/month/year)				
PCT/KE2013/000030	17/01/2013	23/03/2012			
Applicant					
MWANGI, MARY					
This international search report has been a according to Article t 8. A copy is being tra	prepared by this International Searching Autho namitted to the International Bureau.	nty and is transmitted to the applicant			
This international search report consists o	f a total of sheets.				
X It is also accompanied by	a copy of each prior art document cited in this	report.			
1. Basis of the report					
A. With regard to the language, the l	nternational search was carried out on the bas	s of:			
a translation of the	International application into	, which is the language			
of a translation fur	misned for the purposes of international search	(Hules 12.3(8) and 23 1(b))			
authorized by or notified to	o this Authority under Rule 91 (Rule 43 6 <i>bis</i> (a))				
 With regard to any nucleo 	tide and/or amino acid sequence disclosed	n the International application, see Box No. I.			
2. Certain claims were four	nd unsearchable (See Box No. II)				
3 Unity of invention is isc	king (see Box No III)				
4 With regard to the title,					
the text is approved as su	bmitted by the applicant				
X the text has been establis	hed by this Authority to read as follows:				
PRINTING FROM A CELLUI	LAR PHONE				
5 With regard to the abstract,					
X the text is approved as su	bmitted by the applicant				
the text has been establis may, within one month fro	hed, according to Rule 38 2, by this Authority a m the date of mailing of this international search	is it sppears in Box No. IV. The applicant in report, submit comments to thie Authority			
6 With regard to the drawings,					
a. the figure of the drawtngs to be published with the abstract is Figure No1					
X as suggested by the applicant					
as selected by this Authority, because the applicant failed to suggest a figure					
as selected by this Authority, because this figure better characterizes the invention					
b. none of the figures is to b	e published with the abstract				

Form PCT/ISA/210 (first sheet) (July 2009)

INTERNATIONAL SEARCH REPORT

17103

International application No PCT/KE2013/000030

A. CLASSIFICATION OF BUBJECT MATTER INV. GOGF3/12 ADD.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS BEARCHED

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Minimum documentation searched (classification system followed by classification symbols) GO6 F H04M

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

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

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT						
Category*	Citation of document, with indication, where appropriate, of the rele	Relevant to slaim No,				
x	US 2010/144376 A1 (PAWLECKI J BR ET AL) 10 June 2010 (2010-06-10) the whole document	1-13				
X	WO 2010/128339 A2 (SOFTWARE IMAG LTD [GB]; SOORD GEOFFERY HAMMOND WINWOOD) 11 November 2010 (2010- page 14, line 25 - page 16, line figures 5, 6	1-3,9-12				
Furt	ter documents are listed in the continuation of Box C.	X See patent family annex.				
 Special c *A" docume to be c *E" earlier c filing d *C docume specia *O" docume means *P" docume the pri 	ategories of sited documents : ont defining the general state of the art which is not considered of particular relevance application or patent but published on or after the international late ont which may throw doubts on priority claim(s) or which is to establish the publication date of another ortation or other al reason (as specified) ant referring to an oral disclosure, use, exhibition or other b ont published prior to the international filing date but later than ority date claimed	 *T* later document published after the inter- date and not in conflict with the applic the principle or theory underlying the i *X* document of particular relevance; the o considered noval or cannot be consid- stap when the document is taken alon *Y* document of particular relevance; the o considered to involve an inventive sta- combined with one or more other such being obvious to a person skilled in the *&* document member of the same patent 	national filing date or priority ation but sited to understand invention laimed invention cannot be ered to involve an inventive e taimed invention cannot be p when the document is a documents, such combination e art			
Date of the	actual completion of the international search	Date of mailing of the international sea	rch report			
8	8 April 2013 12/04/2013					
Nome and I	nailing address of the ISA/ European Patent Office, P B. 5818 Patentiaan 2 NL - 2280 HV Rijewijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3018	Authorized officer Kochev, Miroslav				

Form PCT/ISA/210 (second sheet) (April 2005)

INTERNATIONAL SEARCH REPORT

Information on patent family members

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17103

International application No

PCT/KE2013/000030 Patent family member(s) Publication date Patent documont Publication cited in search report date 10-06-2010 NONE US 2010144376 A1 A2 11-11-2010 NONE WO 2010128339 -----_____

PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY

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To:			PCT			
see form PCT/ISA/220			WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43 <i>bis</i> .1)			
					Date of mailing {day/month/yea	ar) see form PCT/ISA/210 (second sheet)
Appli See	cant's or agent's file form PCT/ISA/22	reference 20			FOR FURT	HER ACTION
Inter	national application h	No.	International fil	ing date <i>Id</i>	av/month/vear)	Priority date (day/month/year)
PC	T/KE2013/000030)	17.01.2013			23.03.2012
Inten INV	national Patent Class . G06F3/12	sification (IPC) or	i both national clas	ssification a	and IPC	
Appli MW	icant /ANGI, MARY					
1.	This opinion co	intains indication	ons relating to	o the follo	owing items:	
	🖾 Box No. I	Basis of the op	binion			
	🗋 Box No. II	Priority				
Į	🗋 Box No. III	Non-establishr	ment of opinion	with rega	ird to novelty, li	nventive step and industrial applicability
Í	🛛 Box No. iV	Lack of unity o	f invention			
	🖾 Box No. V	Reasoned stat applicability; ci	ement under R tations and exp	lule 43 <i>bis</i> planations	.1(a)(i) with reg	ard to noveity, inventive step and industriai ch statement
	🛛 Box No. VI	Certain docum	ents cited			
	🖾 Box No. VII	Certain defect	s in the internat	tional app	lication	
	🔲 Box No. Vili	Certain observ	ations on the i	nternation	al application	
2.	FURTHER ACT	ION				
If a demand for international preliminary examination is made, this opinion will usually 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 notifed the International Bureau under Rule 66.1 <i>bis</i> (b) that written opinions of this International Searching Authority will not be so considered.						
	If this opinion ia, 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 option	ns, see Form Po	CT/ISA/220.			
Nam	Name and mailing address of the ISA Date of this and			Date of co	ompletion ef	Authorized Officer
	European Patent Office			eac fr-		
_	P B. 5818	Patentiaan 2	Bas	PCT/SA/	210	Kochev, Miroslav
	Tel. +31 7 Fax: +31 5	0 340 • 2040 70 340 • 3016	503			Telephone No +31 70 340-4871

Form PCT/ISA/237 (Cover Sheet) (July 2009)

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/KE2013/000030

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 43bis.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. (means)
 - O on paper
 - in electronic form
 - b. (time)
 - in the International application as filed
 - together with the international application in electronic form
 - Subsequently to this Authority for the purposes of search
- 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:

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

1. Statement

Noveity (N)	Yes: No:	Claims Claims	<u>4, 7, 8, 13</u> <u>1-3, 5, 6, 9-12</u>
Inventive step (IS)	Yes: No:	Claims Claims	<u>1-13</u>
Industrial applicability (IA)	Yes: No:	Claims Claims	<u>1-13</u>

2. Citations and explanations

see separate sheet

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/KE2013/000030

Box No. Vil Certain defects in the International application

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

see separate sheet

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Re Item V

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Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

- 1 Reference is made to the following documents:
 - D1: US 2010/144376 A1 (PAWLECKI J BRENT [US] ET AL) 10 June 2010 (2010-06-10)
 - D2: WO 2010/128339 A2 (SOFTWARE IMAGING GROUP LTD [GB]; SOORD GEOFFERY HAMMOND [GB]; WINWOOD) 11 November 2010 (2010-11-11)
- 2 The present application does not meet the criteria of Article 33(2) PCT, because the subject-matter of claim 1 is not new.
- 2.1 D1 discloses a mobile printing system for printing a document from received electronic print data (rig. 3), said system comprising: a mobile cellular device in communication with a cellular network (rig. 3, #310, #320, par. [0029]); said mobile cellular device in communication with a printer (rig. 3, #340 #346, par. [0029]) and including a network module and a storage media (par. [0033], [0034]), said network module identifying said mobile cellular device to the cellular network as an electronic print data storage device for receipt of electronic print data (par. [0031] [0033]); and said electronic print data being stored on said storage media (par. [0031] [0033]), wherein said electronic print data is converted to an electronic print document by said mobile cellular device for transmission and printing by said printer (par. [0033], [0037]).

Therefore, D1 discloses all the features of independent claim 1.

- 2.2 It should be noted that the subject-matter of claim 1 is also not new based on document D2 (see page 14, line 25 page 16, line 9 and Figures 5 and 6).
- 3 Dependent claims 2-13 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty or inventive step. The reasons being as follows:
- 3.1 The additional features of claims 2, 3, 5, 6, 9-12 are known from D1 (claims 2, 3: par. [0029]; claims 5, 6: par. [0021]; claim 9: fig. 4, par. [0021]; claims 10-12: par. [0021]).

- 3.2 The additional features of claim 4 cannot be considered inventive because they relate to common features of cellular phones.
- 3.3 The additional features of claims 7 and 8 cannot be considered inventive based on the disclosure of D1 (see fig. 4 and par. [0021]). In D2, the cellular device receives documents from a network and to prompt the user or not (based on the type of the network) would be merely a design choice for the skilled person.
- 3.4 The additional features of claim 13 cannot be considered inventive because they relate to common features of print queues.

Re Item VII

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Certain defects in the international application

- 4 Please note the following:
- 4.1 It appears that the two lines following claim 12 relate to a different claim. However, the number is missing. It has been considered that these two lines are in fact dependent claim 13. The numbering should be corrected.
- 4.2 To meet the requirements of Rule 6.3(b) PCT the independent claims should have been properly cast in the two part form, with those features which in combination are part of the closest prior art being placed in the preamble.
- 4.3 Reference signs in parentheses should have been inserted in the claims to increase their intelligibility, Rule 6.2(b) PCT. This applies to both the preamble and characterising portion.
- 4.4 Documents D1 and D2 should be identified in the description (Rule 5.1(a)(ii) PCT).

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PCTR	EQUEST	Original (for SUBMISSION)
		LE MAN PLET
0 0-1	International Application No.	0 CT KEI DU 037 000030
0-2	International Filing Date	17 JAN 2013
0-3	Name of receiving Office and "PCT International Application"	RECEPTION DEST.
0-4	Form PCT/RO/101 PCT Request	
0-4-1	Prepared Using	PCT-SAFE [EASY mode] Version 3.51.055.231 MT/FOP 20120701/0.20.5.19
0-5	Petition	
	The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty	
0-6	Receiving Office (specified by the applicant)	Kenya Industrial Property Office (RO/KE)
0.7	Applicant's or egsnt's file reference	PCTKE2013/30
i	Title of Invention	COMBINATION CELLULAR AND PRINTER DEVICE
11	Applicant	
II-1	This person is	Applicant and inventor
ti-2	Applicant for	All designated States
11-4	Name (LAST, First)	MWANGI, Mary
11-5	Address	P.O.BOX 32821 00600 NAIROBI
11-8	State of nationality	renya Nenya
0-7	State of residence	
11-8	Telephone No	254723900040
Q-10	e-mail	234/23000949
II-10(a)	E-mail authorization	
«- ro(=)	The receiving Office, the International Searching Authority, the International Bureau and the International Preliminary Examining Authority are authorized to use this e-mail address, if the Office or Authority so wishes, to send notifications issued in respect of this international application:	as advance copies followed by paper notifications
li-11	Applicant's registration No, with the Office	PCT/KE2013/000030

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PCT REQUEST

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Original (for SUBMISSION)

v	DESIGNATIONS	<u></u>
V-1	The filing of this request constitutas under Rule 4.9(a), the designation of all Contracting States bound by the PCT on the international filing date, for the grant of every kind of protection svallable and, where applicable, for the grant of both regional and national patents.	
VI-1	Priority claim of earlier national	
VI-1-1	Filing date	23 March 2012 (23.03.2012)
VF1-5	Number	KE/P/2012/00049
VI-1-3	Country	KE
VI-2	Priority document request	
	The receiving Office is requested to prepare and transmit to the International Bureau a certified copy of the earlier application(s) identified above as item(s):	VI-1
VI-J	incorporation by reference :	
	where an element of the international application referred to in Article 11(1)(iii)(d) or (a) or a part of the description, claims or drawings referred to in Rule 20.5(a) is not otherwise contained in this international application but is completely contained in an earlier application whose priority is claimed on the date on which one or more alsments referred to in Article 11(1)(iii) were first received by the receiving Office, that element or part is, subject to confir- mation under Rule 20 6, incorporated by reference in this international application for the purposes of Rule 20 6	
VII-1	international Searching Authority Chosen	European Patent Office (EPO) (ISA/EP)
VIII	Declarations	Number of declarations
VIII-1	Declaration as to the identity of the inventor	1
VIII-2	Declaration as to the applicant's entitlement, as at the international filing date, to apply for and be granted a pateni	1
V(11-3	Dectaration as to the applicant's entitlement, as at the international filing date, to claim the priority of the earlier application	1
VIII-4	Decisration of inventorship (only for the purposes of the designation of the United States of America)	1
VIII-5	Declaration as to non-prejudicial disclosures or exceptions to lack of novelty	

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IX	Check list	Number of sheets	Electronic file(s) attached
IX-1	Request (including declaration sheets)	8	· · · · ·
tX-2	Description	6	-
iX-3	Claims	2	
IX-4	Abstract	1	I
iX-5	Drawings	4	-
IX-7	TOTAL	21	
	Accompanying tems	Paper document(s) attached	Electronic file(s) attached
IX-8	Fee calculation sheet		-
IX-18	PCT-SAFE physical media	-	1
iX-20	Figure of the drawings which should accompany the abstract	FIG1	
IX-21	Language of filing of the international application	English	
X-1	Signature of applicant, agent or common representative		
X-1-1	Name (LAST, First)	MWANGI, Mary	
X-1-2	Name of signatory	· -	
X-1-3	Capacity (if such capacity is not obvious from reading the request)		

FOR RECEIVING OFFICE USE ONLY

10-1	Date of actual receipt of the purported international application	1	710	21	2013	
10-2	Drawings:					
10-2-1	Received	1				
10-2-2	Not received					
10-3	Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international epplication					
10-4	Date of timely receipt of the required corrections under PCT Article f 1(2)			_	-	
10-5	International Searching Authority	ISA/EP				
10-4	Tranamittai of search copy delayed until search fee la paid					

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11-1	Date of receipt of the record copy by	
	the International Bureau	

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PCT (ANNEX - FEE CALCULATION SHEET) Original (for SUBMISSION) (This sheet is not part of and does not count as a sheet of the international application)

0	For receiving Office use only	}		
0-1	International Application No.			
0-2	Date atamp of the receiving Office			<u> </u>
0-4	Form PCT/RO/101 (Annex) PCT Fee Calculation Shee1		•	
0-4-1	Prepared Using	PCT-SAFE [EAS: Version 3.51.0 20120701/0.20	Y mode] 055.231 MT/FOP .5.19	
0-9	Applicant's or agent's file reference	PCTKE2013/30		
2	Applicant	MWANGI, Mary		
12	Calculation of prescribed fees	Fee amount/multiplier	Total amounts (USD)	
12-1	Transmittei fee T	\$		
12-2-1	Search fee 8	Ŷ	· · · · · ·	606.5
12-2-2	International search to be carried out by	EP	////////	
12-3	International filing fee			
	(first 30 sheets) 11	1453 USD		
12-4	Remaining sheets	0		
12-5	Additional amount (X	0 USD		
12-6	Total additional amount 12	0 USD		
12-7	i1+i2= 1	145.3 USD		
12-12	EASY Filing reduction R	USD-109		
12-13	Total International filing fee (i-R) t	\$	· · · · · · · · · · · · · · · · · · ·	134.4
12-14	Fee for priority document		· · · · ·	······································
	Number of priority documents requested	1		
12-15	Fee per document (X	100 USD		
12-16	Total priority document fee: P	\$		100
12-17	Fee for restoration of priority rights RF	,		
•	Number of requests for restoration of priority rights	0		
	Total amount of fees for restoration of prionty rights			
12-19	TOTAL FEES PAYABLE (T+S+I+P+RP)	\$	840.9	,
12-21	Mode of payment	Bank transfer		