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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.

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Declarations under Rule 4.17:

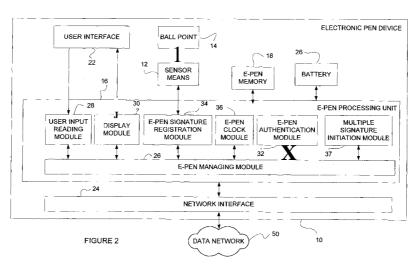
 as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(H))

Published:

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[Continued on next page]

(54) Title: DEVICE, SYSTEM, AND METHOD FOR REGISTRING AND AUTHETNTICATING HANDWRITTEN SIGNATURES AND ARCHIVING HANDWRITTEN INFORMATION



(57) Abstract: There is provided an electronic pen device configured to be used with a remote secure server for registering handwritten signatures, the secure server comprising an authentication database storing authentication information in connection with pre-registered users and a signature registration database for registering handwritten signatures, the electronic pen device comprising: an input/output (I/O) interface; a memory; a tip and capturing means connected thereto for capturing handwritten signatures; a network interface adapted to be connected to a data network, and a processing unit connected to the I/O interface, to the capturing means, to the memory and to the network interface. As another aspect of the invention, there is further provided a system for registering handwritten signatures. As another another aspect of the invention, there is further provided a method of authenticating handwritten signatures. As a further aspect of the invention, there is provided a method of signing a document by a plurality of contracting user. As a further further aspect of the invention, there is provided an electronic pen device configured to be used with a remote server for archiving handwritten information.



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- before the expiration f the time limit for amending the claims and to be republished in the event f receipt famendments (Rule 48.2(h))
- (88) Date of publication of the international search report:

International application No. PCT/CA20 11/000748

A. CLASSIFICATION OF SUBJECT MATTER

IPC: G06F 21/00 (2006.01), G06F 17/00 (2006.01), G06F 3/033 (2006.01), H04L 9/32 (2006.01)

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

B. FIELDS SEARCHED

Mhnmum documentation searched (classification system followed by classification symbols) $G06F\ 21/00\ (2006.01)$. $G06F\ 17/00\ (2006.01)$, $G06F\ 3/033\ (2006.01)$, $H04L\ 9/32\ (2006.01)$

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

Electronic database(s) consulted during the international search (name of database(s) and, where practicable, search terms used) Database used: Epoque, WEST, and Canadian Patent Database

keywords used: signature, database, electronic, pen, network, internet, web, user, person, name, identification, password, pin, handwritten, verify, authenticate, locate, gps, document, capture, enroll, register, set up, sign in, folder, identifier, id

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category'*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	
X Y	US 20090049534 A1 (Chung) 19 February 2009 (19-02-2009) see paragraphs [0028]-[0030], [0040]-[0047], [0049]-[0059], [0067], [0074], and [0141]	1, 2, 6, 7, 9-13, 17-19, and 22-24 5 and 20	
Y	US 2002/003 1243 A1 (Schiller et al.) 14 March 2002 (14-03-2002) see paragraphs [0088] and [0089]	5 and 20	
X	US 6 064 75 1 (Smithies et al.) 16 May 2000 (16-05-2000) see column 3, lines 44-50 and column 4, lines 1-4 and 6-14, column 13, lines 1-6, column 14, lines 51-66, column 17, lines 7-44, and Figure 1	26-30	
A	US 2003/0078880 A1 (Alley et al.) 24 April 2003 (24-04-2003) see whole document	1-25	
A	US 2002/0143683 A1 (Callback) 3 October 2002 (03-10-2002) see whole document	1-25	
A	WO 98/12661 (McConnell et al.) 26 March 1998 (26-03-1998) see whole document	1-25	
A	US 2004/0250070 A1 (Wong) 9 December 2004 (09-12-2004)	25	

[X]	Further documents are listed in the continuation of Box C.	[X]	See patent family annex.		
* "A"	Special categories of cited documents : document defining the general state of the art which is not considered	"Y"	later document published after the international filing date or priority date and not m conflict with the application but citec to understand the principle or theory underlying the invention		
"E"	to be of particular relevance earlier application or patent but published on or after the international filing date	"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		
"L"	document which may $t^{\rm D_{\rm I}C_{\rm IN}V}$ doubts on priority clami(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined rath one or more other such documents such combination being obvious to a person skilled m the art		
"O"	document referring to an oral disclosure, use, exhibition or other means	"&"	document member of the same patent family		
"P"	document published prior to the international filing date but later than the priority date claimed		document memory of the same patent raining		
Date	Date of the actual completion of the international search		Date of mailing of the international search report		
20 December 2011 (20-12-2011)		22 December 20 ₁₁ (22-12-20 ₁₁₎			
Name and mailing address of the ISA/CA		Authorized officer			
Canadian Intellectual Property Office Place du Portage I, CI 14 - 1st Floor, Box PCT 50 Victoria Street		Kristina Bodnar (819) 934-5146			
Gatineau, Quebec K1A 0C9 Facsimile No.: 001-819-953-2476					

International application No. PCT/CA20 11/000748

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of the 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. [] Claim Nos. : because they relate to subject matter not required to be searched by this Authority, namely :
2. [] Claim 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. [] Claim 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. Ill 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:
Claims 1-25 are directed towards a system and method of using an electronic pen device for capturing an electronic signature connected, via a network, to a database that stores personal identification information and uses the information to authenticate a user and allows him or her to store his or her signature in the database, for future use.
Claims 26-30 are directed towards an electronic pen device configured to be used with a remote server for archiving handwritten information by capturing the handwritten information and allowing the user to specify a folder identifier where the information will be classified.
1. [X] As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
 [] 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 claim 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 claim Nos. :
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.

ategory*	Citation of document, with mdication, where appropriate, of the relevant passages	Relevant to claim No.
A	Trevathan et al, "Remote Handwritten Signature Authentication" Proceedings of the 2nd International Conference on Ebusiness and Telecommunication Networks (ICETE "05). 2005. pages 335-339 see whole document	26-30
A	EP 1 365 314 A2 (Sliiraislii et al.) 26 November 2003 (26-1 1-2003) see whole document	26-30

Information on patent family members

			1
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