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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
21 November 2013 (21.11.2013)

WIPO | PCT

(10) International Publication Number
WO 2013/171481 A3

(51) International Patent Classification:
G06F 17/27 (2006.01) *G06F 17/22* (2006.01)
G06F 3/023 (2006.01)

(21) International Application Number:
PCT/GB2013/051244

(22) International Filing Date:
14 May 2013 (14.05.2013)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
1208373.9 14 May 2012 (14.05.2012) GB

(71) Applicant: **TOUCHTYPE LIMITED** [GB/GB]; 91-95 Southwark Bridge Road, London SE1 0AX (GB).

(72) Inventors: **BELL, Michael**; Flat 24, Morrison Buildings North, 35a Commercial Road, London E1 1LB (GB). **FREEMAN, Joe**; 42 Wonford Road, Exeter EX2 4LD (GB). **HATEGAN, Emanuel George**; 49 Kelsey Crescent, Cambridge CB1 9XU (GB). **MEDLOCK, Benjamin**; 21 Lawn Terrace, Blackheath, London SE3 9LL (GB).

(74) Agents: **SMALL, Gary James** et al.; Carpmaels & Ransford, One Southampton Row, London WC1B 5HA (GB).

(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, 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, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, 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, 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, ML, MR, NE, SN, TD, TG).

Published:

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

(88) Date of publication of the international search report:
10 July 2014

(54) Title: MECHANISM, SYSTEM AND METHOD FOR SYNCHRONISING DEVICES

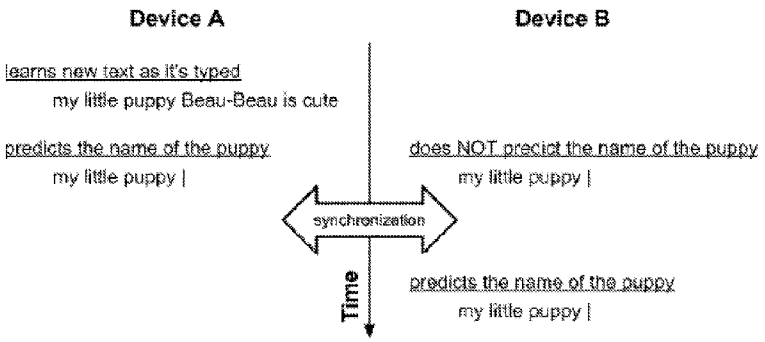


Fig. 2

(57) Abstract: There is provided a mechanism for synchronising a plurality of dynamic language models residing in a plurality of devices associated with a single user, each device comprising a dynamic language model. The mechanism is configured to: receive text data representing text that has been input by a user into one or more of the plurality of devices; train at least one language model on the text data; and provide the at least one language model for synchronising the devices. There is also provided a system comprising the mechanism and a plurality of devices, and a method for synchronising a plurality of dynamic language models residing in a plurality of devices associated with a single user.

WO 2013/171481 A3

INTERNATIONAL SEARCH REPORT

International application No
PCT/GB2013/051244

A. CLASSIFICATION OF SUBJECT MATTER
INV. G06F17/27 G06F3/023
ADD. G06F17/22

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)
G06F

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

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2008/195388 A1 (BOWER JASON [US] ET AL) 14 August 2008 (2008-08-14) abstract paragraphs [0028] - [0029]; figure 2A columns 67-73; figures 1,8,9 -----	1-67,69
A	US 7 035 866 B1 (CHEN CHIA-HSUN [US] ET AL) 25 April 2006 (2006-04-25) abstract column 5, line 62 - column 6, line 29; figure 6 ----- -/--	5,10,12, 24,25, 28, 32-37, 40-44, 49-60

[X] Further documents are listed in the continuation of Box C.

[X] 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 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	Date of mailing of the international search report
5 March 2014	13/03/2014

Name and mailing address of the ISA/	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Woods, Justin

5

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

INTERNATIONAL SEARCH REPORT

International application No.
PCT/GB2013/051244

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.: 70-72
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:

see FURTHER INFORMATION sheet PCT/ISA/210

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 additional 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 an 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.:

1-67(completely); 69(partially)

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.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-67(completely); 69(partially)

   Synchronising a plurality of dynamic language models

   ---

2. claims: 68(completely); 69(partially)

   A method of periodically synchronising data between a mechanism and a device.

Continuation of Box II.2

Claims Nos.: 70-72

Claims 70, 71 and 72 contain references to the drawings. According to Rule 6.2(a) PCT, claims should not contain such references except where absolutely necessary. This is not the case here, as evidenced by the presence of 69 other claims setting out the subject matter of the invention without such references. Moreover, contrary to the requirements of Article 6 PCT, a mere reference to the drawings is not a clear and concise means of defining the matter for which protection is to be sought. The lack of compliance with Rule 6.2(a) and Article 6 PCT is such that no search is possible w.r.t. claims 70, 71 and 72.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guidelines C-IV, 7.2), should the problems which led to the Article 17(2) declaration be overcome.

INTERNATIONAL SEARCH REPORT

International application No
PCT/GB2013/051244

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 2010/112841 A1 (TOUCHTYPE LTD [GB]; MEDLOCK BENJAMIN WILLIAM [GB]; REYNOLDS JONATHAN P) 7 October 2010 (2010-10-07) cited in the application the whole document -----	1-67,69

5

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/GB2013/051244

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2008195388 A1	14-08-2008	NONE	
US 7035866 B1	25-04-2006	US 7035866 B1	25-04-2006
		US 2006184567 A1	17-08-2006
WO 2010112841 A1	07-10-2010	CN 102439542 A	02-05-2012
		EP 2414915 A1	08-02-2012
		US 2012029910 A1	02-02-2012
		WO 2010112841 A1	07-10-2010