



- (51) **International Patent Classification:**  
*A61C 8/00* (2006.01) *G06F 17/50* (2006.01)
- (21) **International Application Number:**  
PCT/HU2015/000047
- (22) **International Filing Date:**  
20 May 2015 (20.05.2015)
- (25) **Filing Language:** Hungarian
- (26) **Publication Language:** English
- (30) **Priority Data:**  
P1400255 20 May 2014 (20.05.2014) HU
- (71) **Applicant:** DICOMLAB KFT. [HU/HU]; Pulz u. 46/B., H-6724 Szeged (HU).
- (72) **Inventors:** VARGA, Endre; Tisza Lajos utca 72/a., H-6725 Szeged (HU). BAGÓ, Balázs; Dankó Pista utca 3/c., H-6723 Szeged (HU). ERDŐHELYI, Balázs; Borbás utca 20., H-6725 Szeged (HU). VARGA, Endre Pál; Tisza Lajos utca 72/a., H-6725 Szeged (HU).
- (74) **Agent:** DANUBIA PATENT & LAW OFFICE LLC; Bajcsy-Zsilinszky út 16., H-1051 Budapest (HU).
- (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, IR, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, 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, SA, 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, ST, 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, KM, ML, MR, NE, SN, TD, TG).

**Declarations under Rule 4.17:**

- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

**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))*

**(88) Date of publication of the international search report:**

7 January 2016

(54) **Title:** PROCESS AND SYSTEM FOR DESIGNING AND MANUFACTURING IMPLANTATION GUIDE

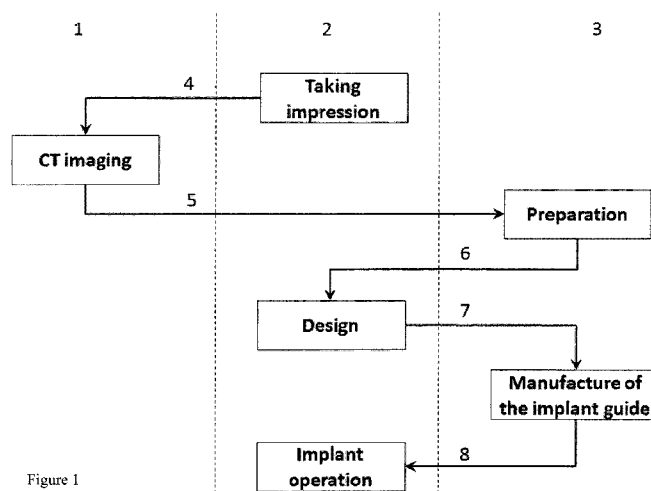


Figure 1

(57) **Abstract:** A process is disclosed for designing and manufacturing of an implantation guide, wherein the process comprises the following steps: an impression from the oral structures is made by a spoon with registration markers; the impression is digitized; the patient is digitized with the impression tray in place; the digitized images are registered with a treatment planning software; a treatment plan is designed; the digital model of the surgical guide is then made with a guide designing software based on the treatment plan; and on the basis of the digitized model of the implantation guide, the physical equivalent of the surgical guide is prepared. A system is disclosed for the designing and preparation of a surgical guide, which comprises an impression spoon; a computer for the registration and planning; another computer for the planning and preparing of the surgical guide; a surgical tray; and an implantation guide according to the invention.



## INTERNATIONAL SEARCH REPORT

International application No.

PCT/HU 2015/000047

A. CLASSIFICATION OF SUBJECT MATTER														
<p style="text-align: center;"><b>A61C 8/00 (2006.01)</b>  <b>G06F 17/50 (2006.01)</b></p> <p>According to International Patent Classification (IPC) or to both national classification and IPC</p>														
B. FIELDS SEARCHED														
Minimum documentation searched (classification system followed by classification symbols)														
A61C 8/00, 13/38, A61F 2/00, G06F 17/50														
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)														
Google Patents, Patentscope, USPTO DB, Espacenet, DWPI, CIPO (Canada PO), SIPO DB, AIPN, DEPATISnet, VINITI, SCSML.FSSILRU, PatSearch (RUPTO internal)														
C. DOCUMENTS CONSIDERED TO BE RELEVANT														
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.												
Y	US 2011/0136077 A1 (PHILIPPE ALBERT PAUL GHISLAIN DE MOYER) 09.06.2011, abstract, paragraphs [0009], [0018], [0024], [0026], [0027], [0028], [0031] - [0043], claims 1, 8, fig. 22	1-3, 7-9, 15												
Y	US 2011/0008751 A1 (NOBEL BIO CARE SERVICES AG) 13.01.2011, abstract, paragraphs [0059], [0080], [0086], [0102], [0103]	1-3, 7-9, 15												
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.														
<table border="0"> <tr> <td>* Special categories of cited documents:</td> <td>“I” 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</td> </tr> <tr> <td>“A” document defining the general state of the art which is not considered to be of particular relevance</td> <td>“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</td> </tr> <tr> <td>“E” earlier document but published on or after the international filing date</td> <td>“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</td> </tr> <tr> <td>“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)</td> <td>“&amp;” document member of the same patent family</td> </tr> <tr> <td>“O” document referring to an oral disclosure, use, exhibition or other means</td> <td></td> </tr> <tr> <td>“P” document published prior to the international filing date but later than the priority date claimed</td> <td></td> </tr> </table>			* Special categories of cited documents:	“I” 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	“A” document defining the general state of the art which is not considered to be of particular relevance	“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	“E” earlier document but published on or after the international filing date	“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	“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)	“&” document member of the same patent family	“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	
* Special categories of cited documents:	“I” 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													
“A” document defining the general state of the art which is not considered to be of particular relevance	“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													
“E” earlier document but published on or after the international filing date	“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													
“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)	“&” document member of the same patent family													
“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														
Date of the actual completion of the international search		Date of mailing of the international search report												
26 November 2015 (26.11.2015)		03 December 2015 (03.12.2015)												
Name and mailing address of the ISA/RU: Federal Institute of Industrial Property, Berezhkovskaya nab., 30-1, Moscow, G-59, GSP-3, Russia, 125993 Facsimile No: (8-495) 531-63-18, (8-499) 243-33-37		Authorized officer  A. Ilyin  Telephone No. (495)531-64-81												

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/HU 2015/000047

**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.: 4-6, 10-14  
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:

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.:

**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.