

1) Family number: 33001348 (EP1657610A2)

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Title: ASSET MAINTENANCE OR INSPECTION SYSTEM AND METHOD

Abstract: To achieve a maintenance or inspection system in accordance with an asset scale. Specifically, the combination of four management software modules is properly changed to easily configure a maintenance or inspection system in accordance with an asset scale. [Construction] An asset maintenance or inspection system comprising a first computer and a second computer capable of mutual information exchange with the first computer, wherein the first and second computer are configured by a proper combination of four management modules, a process management module, a procedure management module, a visual information management module, and a form management module, and the combination can be changed to easily configure a maintenance or inspection system in accordance with an asset scale.

Classifications:

International (IPC 8-9): G05B19/418 G06F15/163 G06F19/00
G06Q10/00 G06Q10/06 G06Q50/00 (Advanced/Invention);
G06Q10/00 (Advanced/Non-invention)

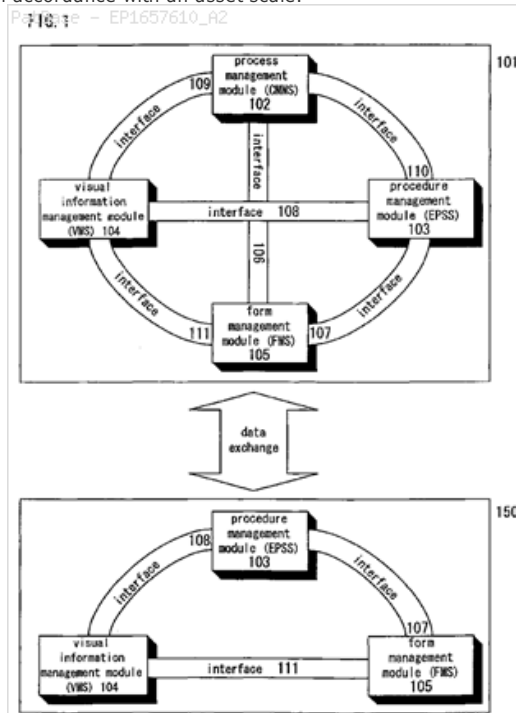
International (IPC 1-7): G06F15/163 G06F17/60

CPC: Y02P90/18 Y02P90/14 G05B19/4185 G05B2219/32226

G05B2219/32235 G06Q10/06 Y02P90/86

European: G05B19/418N G06Q10/06 S05B219/32226

S05B219/32235



Family:

Publication number	Publication date	Application number	Application date
CN1773541 A	20060517	CN200510125416	20051114
DE602005044258 D1	20140904	DE200560044258T	20051111
EP1657610 A2	20060517	EP20050024673	20051111
EP1657610 A3	20101013	EP20050024673	20051111
EP1657610 B1	20140723	EP20050024673	20051111
JP2006139618 A2	20060601	JP20040329656	20041112
JP4918218 B2	20120418	JP20040329656	20041112
KR100769758 B1	20071023	KR20050107952	20051111
KR20060052622 A	20060519	KR20050107952	20051111
SG122961 A1	20060629	SG20050008455	20051107
TW200627231 A	20060801	TW20050138872	20051104
TWI290289 B	20071121	TW20050138872	20051104

Priority:

JP20040329656 20041112 EP20050024673 20051111

Probable Assignee: MITSUBISHI HEAVY IND LTD

Assignee(s): (std): MITSUBISHI HEAVY IND LTD ; XYBERNAUT CORP

Assignee(s): MITSUBISHI HEAVY INDUSTRIES LTD

Inventor(s): (std): MADDUX EDWARD P JR ; MADDUX JR ; ONO HIDETAKA ; SHIMADA HITOAKI ; SHIMADA TOYOFUMI ; SONODA YOSHIKI ONO HIDETAKA S ; SONODA YOSHIKI

Inventor(s): SONODA YOSHIKI ADVANCED TECH RESEARCH CENTER ; MADDUX EDWARD P ; SONODA YOSHIKI ONO HIDETAKA SHIMADA TOYOFUMI ; SONODA YOSHIKI ONO HIDETAKA SHIMADA TOYOFUMI MADD ; SONODA YOSHIKI ADVANCED TECH RESEARCH CENTER ; SONODA YOSHIKI ONO HIDETAKA SHIMADA TOYOFUMI MADDUX EDWARD P JR ; SHIMADA TOYOFUMI RYOMEI ENGINEERING CO LTD ; ONO HIDETAKA MITSUBISHI HEAVY IND LTD ; MADDUX, JR., EDWARD P. ; SHIMADA TOYOFUMI RYOMEI ENGINEERING CO LTD ; ONO HIDETAKA MITSUBISHI HEAVY INDUSTRIES LTD

Agent(s): HOFFMANN EITL PATENT U RECHTSANWALTE PARTMBB; HOFFMANN EITL

Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK NL PL PT RO SE SI SK TR YU

Title: AUTOMATION DEVICE FOR INTERACTION BETWEEN MAGAZINE, ROBOT AND PRODUCTION LINE OR MACHINE, CONTROLS INTERACTION VIA PARAMETER INTERFACE

Abstract: Interaction is controlled using a parameter interface.

Classifications:

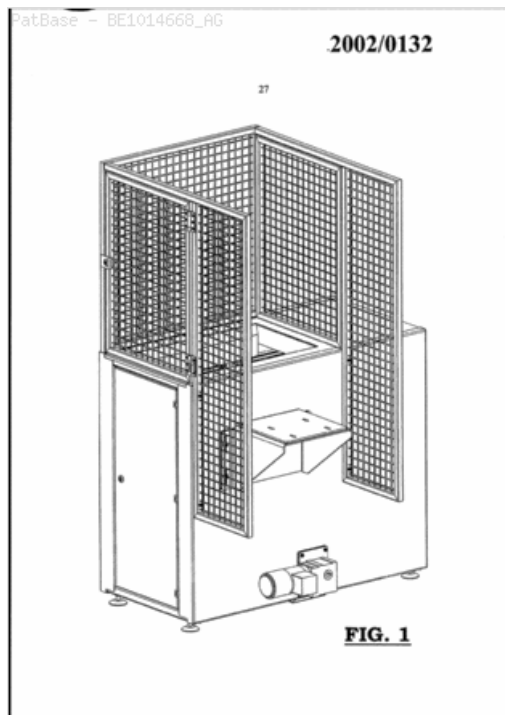
International (IPC 8-9): G05B19/418 (Advanced/Invention);

G05B19/418 (Core/Invention)

International (IPC 1-7): G05B19/418

CPC: G05B19/41815 Y02P90/04 Y02P90/08 Y02P90/14

European: G05B19/418C



Family:

Publication number	Publication date	Application number	Application date
BE1014668 AG	20040302	BE20020000132	20020227

Priority:

BE20020000132 20020227

Probable Assignee: REO ENGINEERING B A BV

Assignee(s): (std): REO ENGINEERING B A BV ; REO ENGINEERING B V B A

Assignee(s): REO ENGINEERING BVBA

Inventor(s): (std): JOHAN LAMBRECHT ; OSWALD REBRY ; TOM REBRY

Inventor(s): REBRY OSWALD ; REBRY TOM ; LAMBRECHT JOHAN

Title: A WOODWORKING MACHINE TOOL AND A BUILT-IN REMOTE SERVICE SYSTEM

Abstract: A machine tool (1) for working parts (2) made of wood comprises CNC type electronic control means (3) implemented on it, and a communications port (4) for second means (5) of the modem type for transferring data to a remote station, and is characterised in that it further comprises a controller module (6) connected to a user interface (7), to the CNC type control means (3) and to the communications port (4) so as to enable at least the following: the linking up to a remote network server; the retrieval of data from the CNC means (3); the sending of the CNC (3) data and of machine identification data to the remote server through the communications port (4) and through the transmission means (5), so that at least the remote data acquisition and remote diagnosis functions are made possible.

Classifications:

International (IPC 8-9): G05B19/05 G05B19/406

G05B19/414 (Advanced/Invention);

G05B19/05 G05B19/406 G05B19/414 (Core/Invention)

International (IPC 1-7): G05B19/05 G05B19/406 G05B19/414

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G05B2219/24001 G05B2219/24018 G05B2219/24048

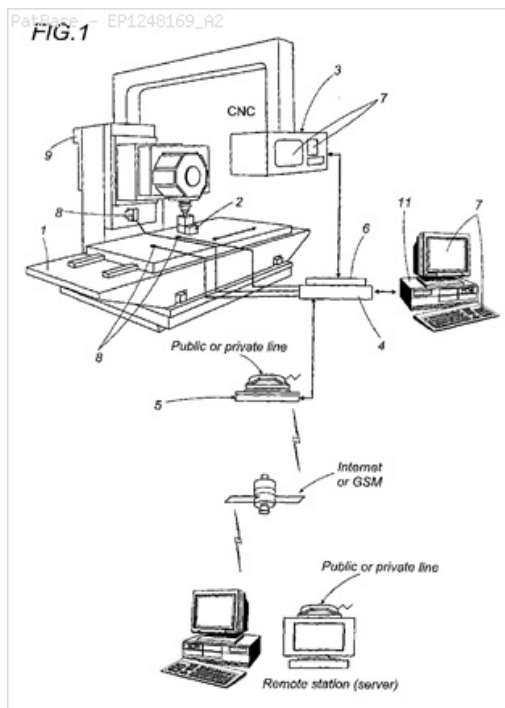
G05B2219/24053 G05B2219/24058 G05B2219/31104

G05B2219/32226 G05B2219/33284 G05B2219/34038

European: G05B19/05S G05B19/406 G05B19/414 S05B219/24001

S05B219/24018 S05B219/24048 S05B219/24053 S05B219/24058

S05B219/31104 S05B219/32226 S05B219/33284 S05B219/34038

**Family:**

Publication number	Publication date	Application number	Application date
EP1248169 A2	20021009	EP20020425163	20020315
EP1248169 A3	20040825	EP20020425163	20020315
ITRN20010026 A1	20020923	IT2001RN00026	20010321

Priority:

IT2001RN00026 20010321

Probable Assignee: SCM GROUP SPA**Assignee(s):** (std): SCM GROUP SPA ; SCM GROUP S P A**Inventor(s):** (std): AURELI ALFREDO**Designated states:** AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

Title: METHOD AND SYSTEM TO OBTAIN AUTOMATIC QUOTATIONS FROM MANUFACTURING DETAILS

Abstract: A network system (10) and method for enabling automatic price quotations for the production of a product and/or automatic production of a product without the need for a customer to disclose proprietary drawings and specifications to the supplier. One aspect of the invention is directed to a network system (10) and method for obtaining price quotations for the production of a product from suitable supplier members within the network system, wherein the manufacturing details of the product are utilized to develop the price quotation for each supplier member, but are not required to be disclosed to the supplier members for such purpose. Another aspect of the invention is directed to a network system (10) and method for ordering the production of a product whereby the manufacturing details for the product are conveyed to the supplier member in a machine readable form that can be implemented by the supplier member's specific process machinery for immediate production, and subsequent delivery.

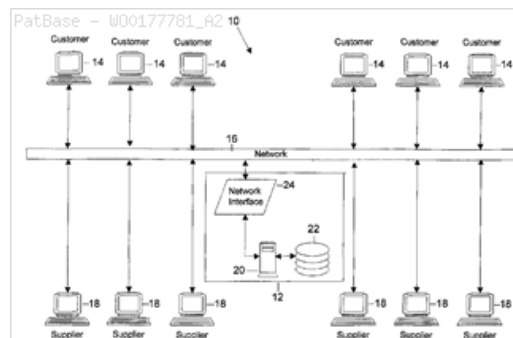
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International (IPC 8-9): G06Q30/00 (Advanced/Invention)

International (IPC 1-7): G06F17/60

CPC: G06Q30/06

European: G06F17/60B G06Q30/06



Family:

Publication number	Publication date	Application number	Application date
AU2001255257 AA	20020708	AU20010255257	20010406
WO0177781 A2	20011018	WO2001US11347	20010406
WO0177781 A3	20020704	WO2001US11347	20010406

Priority:

US20000544894 20000407 WO2001US11347 20010406

Probable Assignee: OPTIMATION INC

Assignee(s): (std): LUNDY MICHAEL D ; OPTIMIZATION INC

Inventor(s): (std): LUNDY MICHAEL D

Inventor(s): MICHAEL D LUNDY

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SR TS TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

Title: METHOD AND SYSTEM FOR DESIGNING AND PRODUCING DENTAL PROSTHESES AND APPLIANCES

Abstract: A virtual model of an intraoral cavity is provided, wherein this process is initialized by a dental clinic, and the design and manufacture of a suitable dental prosthesis for the intraoral cavity is shared between a dental lab and a service center.

Classifications:

International (IPC 8-9): A61B5/00 A61C13/00 A61C13/34 A61C5/10

A61C5/77 A61C8/00 A61C9/00 B29C39/00 G06F15/00

G06F19/00 (Advanced/Invention);

A61C13/09 A61C7/00 A61C8/00 (Advanced/Nor

International (IPC 1-7): A61C13/00 A61C5/10

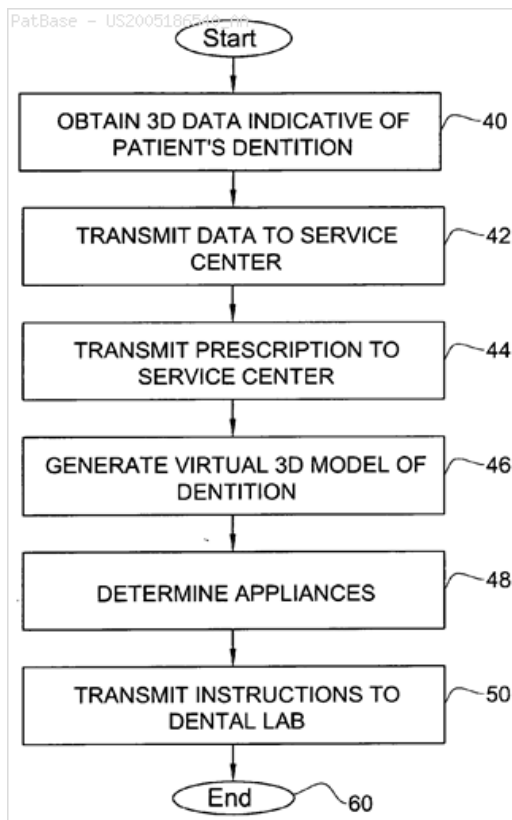
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A61C5/73 A61C9/0053 A61C13/34 G16H39/48 A61C5/73

A61C5/73 A61
Y10T20/40E67

European: A61C13/00C1 A61C5/10 K61C13/09 K61C3/00C

European:
K61C8/00G

US: 1/1 29/896.1 29/896.100S 382/128 433/172 433/172S
433/202.1 433/202.100P 433/213 433/214 433/223 433/223P
433/229 700/117 700/118 700/118S 700/182 700/197 700/197S
700/97 700/98 700/98P 702/152



Family:

Publication number	Publication date	Application number	Application date
EP1568335 A2	20050831	EP20050003975	20050224
EP1568335 A3	20051228	EP20050003975	20050224
EP1568335 B1	20160907	EP20050003975	20050224
EP3130311 A1	20170215	EP20160181070	20050224
ES2599310 T3	20170201	ES20050003975T	20050224
JP2006021024 A2	20060126	JP20050049145	20050224
US2005186540 AA	20050825	US20050062622	20050223
US2008131841 AA	20080605	US20080007015	20080104
US2010241262 AA	20100923	US20100789573	20100528
US2012239177 AA	20120920	US20120399866	20120217
US2014142736 AA	20140522	US20130061598	20131023
US2016354185 A9	20161208	US20130061598	20131023
US2017143457 AA	20170525	US20160371005	20161206
US7333874 BB	20080219	US20050062622	20050223
US7738989 BB	20100615	US20080007015	20080104
US8145340 BB	20120327	US20100789573	20100528
US8577493 BB	20131105	US20120399866	20120217
US9539071 BB	20170110	US20130061598	20131023

Priority:

US20040546946P	20040224	US20040546947P	20040224	US20050062622	20050223
EP20050003975	20050224	US20080007015	20080104	US20100789573	20100528
US20120399866	20120217	US20130061598	20131023	US20160371005	20161206

Probable Assignee: ALIGN TECHNOLOGY INC

Assignee(s): (std): ALIGN TECH INC ; ALIGN TECHNOLOGY INC ; CADENT LTD ; KOPELMAN AVI ; TAUB ELDAD

Assignee(s): ORIX VENTURE FINANCE LLC

Inventor(s): (std): TAUB ELDAD ; KOPELMAN AVI

Agent(s): GRUENECKER PATENT U RECHTSANWALTE PARTG MBB; MILTENYI PETER; NATH AND ASSOCIATES PLLC, SIXTH FLOOR; NATH AND ASSOCIATES PLLC SIXTH FLOOR; NATH AND ASSOCIATES; THE NATH LAW GROUP; NATH LAW GROUP; MEYER JERALD L; MOFFA MATTHEW J; MATTHEW J; JERALD L; DEREK; ROBERT T; KILPATRICK TOWNSEND AND STOCKTON LLP; WILSON SONSINI GOODRICH AND ROSATI

Designated states: AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

3) Family number: 28290204 (US2002188622A)

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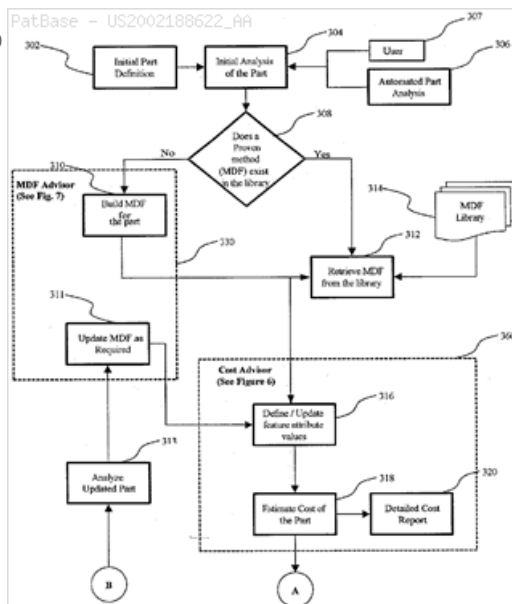
Title: METHOD AND SYSTEM FOR CAPTURING, MANAGING, AND DISSEMINATING MANUFACTURING KNOWLEDGE

Abstract: A independent method for configuring and extracting detailed manufacturing knowledge for fabricating an object, tool or part and storing the data to a data file or data structure. The method includes extracting design criteria from a data file and parsing design criteria into elemental manufacturing building modules independent of the data file and storing the captured criteria data file. Additional manufacturing knowledge is then inputted into the meta-data file not contained in the data file by extracting manufacturing knowledge from a database housing manufacturing knowledge and incorporating this knowledge into data file which is capable of being translated to Numerical Control machine language.

Classifications:

International (IPC 8-9): G05B19/4097 G06F17/00 G06F17/30

G06F3/00 G06F7/00 G06Q50/04 G06Q90/00 (Advanced/Invention);
G05B19/4097 G06F17/00 G06F17/30 G06F3/00 G06F7/00 G06Q50/00
G06Q90/00 (Core/Invention)
International (IPC 1-7): G06F17/00 G06F17/30 G06F3/00 G06F7/00
CPC: Y10S707/99933 Y10S707/99934 Y10S707/99936
Y10S707/99943 Y10S707/99945 G06Q50/04 G05B19/4097
G05B2219/36284 G06Q90/00 Y02P90/30
European: G05B19/4097 G06Q50/04 G06Q90/00 S05B219/36284
US: 1/1 1/1P 70/7.4 70/7.6 70/7.10 70/100 70/102 70/104
70/104.1 70/7.3 70/7.4 70/7.6 70/7.91 70/7.813 70/7.999.003
70/7.999.004 70/7.999.006 70/7.999.01 70/7.999.1 70/7.999.100S
70/7.999.102 70/7.999.104 70/7.999.104S



Family:

Publication number	Publication date	Application number	Application date
AU2002259239 AA	20021125	AU20020259239	20020515
CA2447321 AA	20031114	CA20022447321	20020515
EP1393152 A1	20040303	EP20020729233	20020515
EP1393152 A4	20090121	EP20020729233	20020515
TW1249684 B	20060221	TW20020110165	20020515
US2002188622 AA	20021212	US20020063802	20020514
US2005038821 AA	20050217	US20040953809	20040928
US6823342 BB	20041123	US20020063802	20020514
US7010544 BB	20060307	US20040953809	20040928
WO02093350 A1	20021121	WO2002US15564	20020515

Priority:

US20010291298P 20010515 US20020063802 20020514 WO2002US15564 20020515
US20040953809 20040928

Probable Assignee: CUFER ASSET LTD LLC

Assignee(s): (std): VYKOR INC ; VOR SOFTWARE MGMT LLC ; WALLEN TODD ALAN ; WARD WILLIAM ERIC

Assignee(s): WALLEN TODD A ; CUFER ASSET LTD LLC ; LACHAPELLE GERALD P ; SILICON VALLEY BANK ; VOR SOFTWARE MGMT

Inventor(s): (std): WALLEN TODD A ; WARD WILLIAM ERIC ; LACHAPELLE GERALD P ; WALLEN TODD ALAN

Inventor(s): GERALD P. LACHAPELLE ; TODD ALAN WALLEN ; WILLIAM ERIC WARD ; LACHAPELLE GERALD ; WALLEN TODD ; WARD WILLIAM

Agent(s): SIM AND MCBURNEY; FENWICK AND WEST LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG UZ VN YU ZA ZM ZW

4) Family number: 33513206 (US2006235706A)

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Title: SYSTEM AND METHOD TO IMPROVE MANUFACTURING

Abstract: A system and related method for the rapid response to one or more product fabrication bid requests. The system includes a translation function for translating received product information into information suitable for a manufacturer to produce fabrication information. The system further includes a product fabrication function for generating product fabrication setup sheets and programming based on the translated product information. The system also includes a bid preparation function that produces bid information, such as pricing and scheduling, based on the generated product fabrication information. A process that had taken days to complete is finished in minutes. The related method includes the steps of querying a database of available manufacturers for their capability and available equipment to fabricate a desired product. The method also includes the steps of translating received product information into manufacturing information applicable to one or more identified manufacturers, generating product fabrication information specific to the one or more identified manufacturers, and producing responsive bid information based on the generated product fabrication information. A plurality of identified manufacturers may join together to use the system and method to respond to a bid request.

Classifications:

International (IPC 8-9): G05B19/4099 G06F19/00 G06Q30/00

G06Q99/00 (Advanced/Invention);

G06Q30/00 G06Q99/00 (Core/Invention)

CPC: G05B2219/31325 G05B2219/32102 G05B2219/35173

G05B2219/35216 G05B19/4099 G06Q10/04 Y02P90/20 Y02P90/265

G05B19/41865 G06Q10/10 G06Q10/06 G06Q30/0283 G06Q30/08

G06Q40/04

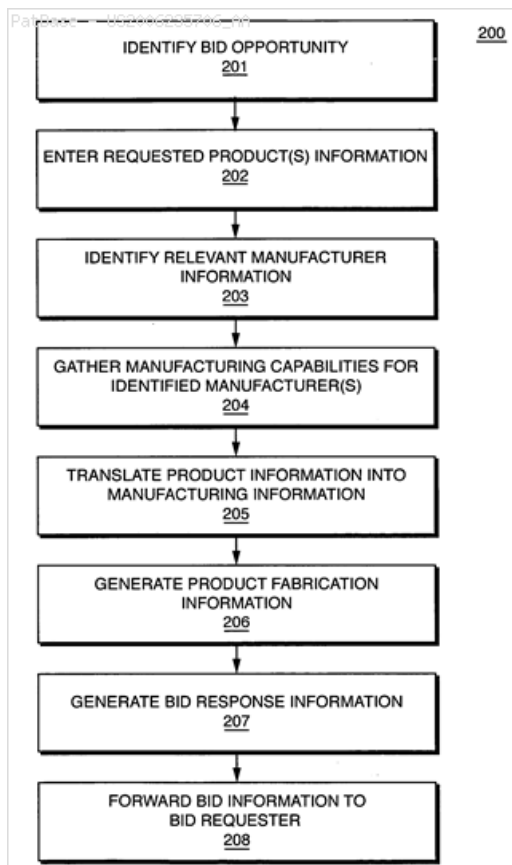
European: G06Q10/06 G06Q10/10 G06Q30/0283 G06Q30/08

G06Q40/04

US: 700/103 700/117 700/121 700/159 700/182 700/95 705/1

705/1.1 705/26 705/26.3 705/27 705/37 705/37P 705/400 716/137

716/15



Family:

Publication number	Publication date	Application number	Application date
US2006235706 AA	20061019	US20050106279	20050414
US7747470 BB	20100629	US20050106279	20050414
US8340807 BA	20121225	US20090476530	20090602
US9002501 BA	20150407	US20120725288	20121221

Priority:

US20050106279 20050414 US20080016713 20080118 US20090476530 20090602
US20120725288 20121221

Probable Assignee: TIME WISE SOLUTIONS LLC

Assignee(s): (std): LALLIER CHRISTOPHER ; RODRIGUE RODNEY P ; STIMAC ALFREDO ; TIME WISE SOLUTIONS LLC

Inventor(s): (std): RODRIGUE RODNEY ; SHEHATA TERRY ; STIMAC ALFREDO ; MEADOWS LARRY ; RODRIGUE RODNEY P ; LALLIER CHRISTOPHER

Agent(s): CHRIS A CASEIRO; VERRILL DANA LLP; CHRIS A; CASEIRO BURKE LLC

5) Family number: 59069211 (US2015127131A)

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Title: METHOD FOR IMPLEMENTING DESIGN-FOR-MANUFACTURABILITY CHECKS

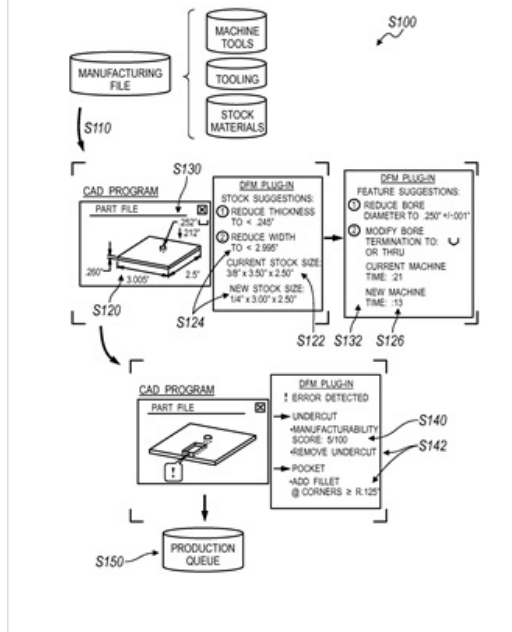
Abstract: One variation of a method for implementing design-for-manufacturing checks during construction of a virtual model of a real part includes: in response to insertion of a virtual feature into the virtual model, estimating a minimum stock geometry for the real part based on the virtual feature; selecting a first material stock cross-section from a set of available material stock cross-sections of a material designated for the real part based on the minimum stock geometry; at a first time, prompting a user to adjust a dimension of the virtual feature to enable production of the real part with a second material stock cross-section in the set of material stock cross-sections, less than the first material stock cross-section; at a second time succeeding the first time, submitting, to a manufacturing facility and over a computer network, an order for production of a unit of the real part according to the virtual model.

Classifications:

International (IPC 8-9): G01B21/00 G01B5/008 G05B19/00
G05B19/4063 G05B19/4069 G05B19/4097 G05B19/418 G06F17/50
G06F19/00 G06Q30/00 G06Q30/02 G06Q30/06
G06Q50/04 (Advanced/Invention)

CPC: G06Q30/0611 G05B19/41875 G01B21/00 G01B5/008
G05B2219/37205 G05B2219/35218 G05B2219/49123 G05B19/4097
G05B2219/35134 G05B2219/35193 G06F2119/18 G06Q30/0283
G06Q30/0635 Y02P80/40 Y02P90/265

US: 1/1 700/97 700/98 702/81 702/84 705/26.4

**Family:**

Publication number	Publication date	Application number	Application date
EP3058496 A1	20160824	EP20140854740	20141017
EP3058496 A4	20170712	EP20140854740	20141017
JP2016536672 T2	20161124	JP20160520154T	20141017
JP6249538 B2	20171220	JP20160520154T	20141017
US2015127131 AA	20150507	US20140517734	20141017
US2015127480 AA	20150507	US20140517711	20141017
US2016033251 AA	20160204	US20150807050	20150723
US2016033960 AA	20160204	US20150807350	20150723
US2016259323 AA	20160908	US20160153100	20160512
US2016370790 AA	20161222	US20160233349	20160810
US2017270578 AA	20170921	US20170611096	20170601
US2018253770 AA	20180906	US20180971102	20180504
US2018329393 AA	20181115	US20180045984	20180726
US2019064772 AA	20190228	US20180172376	20181026
US2019213653 AA	20190711	US20190355053	20190315
US2019219985 AA	20190718	US20190362489	20190322
US2020004223 AA	20200102	US20190567770	20190911
US9367063 BB	20160614	US20140517734	20141017
US9441936 BB	20160913	US20150807350	20150723
US9697554 BB	20170704	US20140517711	20141017
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WO15058147 A1	20150423	WO2014US61241	20141017
WO15058152 A1	20150423	WO2014US61250	20141017
WO16018717 A1	20160204	WO2015US41764	20150723

Priority:

US20130892367P	20131017	US20130892370P	20131017	US20140030261P	20140729
US20140517711	20141017	US20140517734	20141017	WO2014US61250	20141017
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US20190362489	20190322	US20190567770	20190911		

Probable Assignee: PLETHORA CORP**Assignee(s):** (std): PLETHORA CORP**Assignee(s):** VENTURE LENDING AND LEASING IX INC ; VENTURE LENDING AND LEASING VII INC ; VENTURE LENDING AND LEASING VIII INC**Inventor(s):** (std): PINKSTON NICHOLAS J ; HERRMAN JEREMY ; PINKSTON NICK ; STULTS JONATHAN**Agent(s):** STANNERS DAVID RALPH; KITA AOYAMA INT PATENT BUREAU; JEFFREY; DIANA; SCHOX JEFFREY; LIN DIANA**Designated states:** AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

with restricted accessibility by providing a probe-shaped non-contact adapted to perform a scan 360 degrees around the axis of the probe and a method for scanning. The invention furthermore relates to the creation of high precision three-dimensional replicas of real objects using 3-D scan data obtainable with the scanner according to the invention. Furthermore, the invention relates to a specific embodiment for scanning the human ear and ear canal.

Classifications:

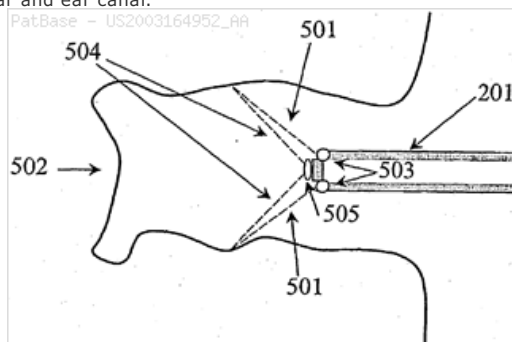
International (IPC 8-9): A61B1/00 A61B1/04 A61B1/05 A61B1/227 G01B11/24 G01B11/25 G01B3/30 (Advanced/Invention); A61B5/107 (Advanced/Non-invention); A61B1/00 A61B1/04 A61B1/05 A61B1/227 G01B11/24 G01B3/30 (Core/Invention); A61B5/107 (Core/Non-invention)

International (IPC 1-7): A61B1/05 G01B11/00 G01B11/24 G01B11/25 G01B3/30

CPC: G06T7/521 A61B5/4547 B33Y50/00 A61B1/05 A61B1/227 A61B5/1076 G01B3/30 G01B11/24 G01B11/25 B33Y80/00

European: A61B1/05 A61B1/227 G01B11/24 G01B11/25 G01B3/30 G06T7/00R3 K61B5/107J K61B5/45R2B

US: 356/603 600/103 600/117 600/129



Family:

Publication number	Publication date	Application number	Application date
AT431541 E	20090515	AT20010960205T	20010824
AU2001281761 AA	20020304	AU20010281761	20010824
AU2001283812 AA	20020304	AU20010283812	20010824
AU200181761 A1	20020304	AU20010081761	20010824
AU200181761 A5	20020304	AU20010081761	20010824
AU200183812 A1	20020304	AU20010083812	20010824
AU200183812 A5	20020304	AU20010083812	20010824
DE60138713 D1	20090625	DE20016038713	20010824
DK1314000 T3	20090817	DK20010960205T	20010824
EP1314000 A1	20030528	EP20010960205	20010824
EP1314000 B1	20090513	EP20010960205	20010824
EP1314000 B8	20090812	EP20010960205	20010824
ES2327212 T3	20091027	ES20010960205T	20010824
US2003164952 AA	20030904	US20030344703	20030410
US7625335 BB	20091201	US20010344703	20010824
WO0216865 A2	20020228	WO2001DK00564	20010824
WO0216865 A3	20020620	WO2001DK00564	20010824
WO0216867 A1	20020228	WO2001DK00561	20010824

Priority:

DK20000001258 20000825 US20000244561P 20001031 WO2001DK00561 20010824
WO2001DK00564 20010824

Probable Assignee: 3SHAPE APS

Assignee(s): (std): 3SHAPE APS ; 3SHAPE AS ; CLAUSEN TAIS ; DEICHMANN NIKOLAJ ; FISKER RUNE ; VASILJEV BARTHE CHRISTOPHE

Assignee(s): 3SHAPE A S

Inventor(s): (std): DEICHMANN NIKOLAJ ; VASILJEV BARTHE CHRISTOPHE ; CLAUSEN TAIS ; FISKER RUNE ; BARTHE CHRISTOPHE VASILJEV

Inventor(s): CHRISTOPHE VASILJEV BARTHE ; NIKOLAJ DEICHMANN ; TAIS CLAUSEN ; RUNE FISKER

Agent(s): HOEIBERG A S ; JACOBSON HOLMAN PLLC

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PH PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

7) Family number: 23368247 (US2004138775A)

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Title: PRODUCT DESIGN SYSTEM AND METHOD

Abstract: A system for designing CAD assemblies and products over a network. The system includes a CAD system, and a design system. The design system includes an administration CAD adapter, an administration system, a scripting engine, a database, and a server CAD adapter. The administration CAD adapter communicates information between the administration system and the CAD system. The administration system is adapted to define relationships between separate CAD objects and Web objects. The scripting engine generates the assembly instructions and a product configuration form from the defined relationships. A client connects to the design system through a network and a server that is connected to the design system or is directly connected to the design system. The client receives the product configuration form, and a designer uses the form to generate a CAD product design. The product design form is structured so that fields on the form are automatically modified in response to entries on the form or other entries connected to the form. Once the completed form is submitted, the server CAD adapter generates assembly instructions, which are executed by the CAD system to generate the completed product design based on inputs from the product configuration form.

Classifications:

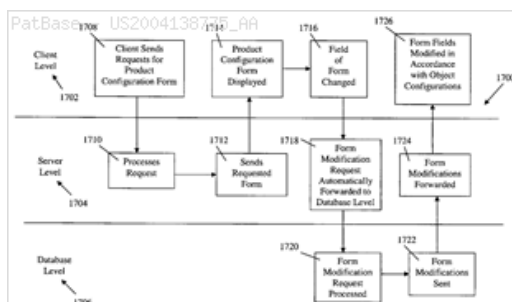
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International (IPC 1-7): G06F17/50 G06F19/00

CPC: G06F30/00 G06F2111/02 Y10S715/964

European: G06F17/50 S06F217/04

US: 345/964 700/103 700/182 700/182P 700/182S 700/97 700/97P 700/97S 703/1 715/964



Family:

Publication number	Publication date	Application number	Application date
DE10129209 A1	20020613	DE20011029209	20010618
US2004138775 AA	20040715	US20030696087	20031029
US2005251274 AA	20051110	US20050182347	20050715
US6647305 BA	20031111	US20000596461	20000619
US7127308 BB	20061024	US20050182347	20050715

Priority:

US20000596461 20000619 US20030696087 20031029 US20050182347 20050715

Probable Assignee: SIMPLIFIELD LOGIC INC

Assignee(s): (std): BIGELOW DAVID H ; SIMPLIFIED LOGIC INC

Assignee(s): SIMPLIFIELD LOGIC INC

Inventor(s): (std): BIGELOW DAVID H

Inventor(s): BIGELOW DAVID

Agent(s): INTELLECTUAL PROPERTY GROUP, BOSE MCKINNEY AND EVANS LLP; INTELLECTUAL PROPERTY GROUP
BOSE MCKINNEY AND EVANS LLP; BOSE MCKINNEY AND EVANS LLP

8) Family number: 53331408 (US2015051999A)

© PatBase

Title: VENDOR INTERFACE FOR ITEM DELIVERY VIA 3D MANUFACTURING ON DEMAND

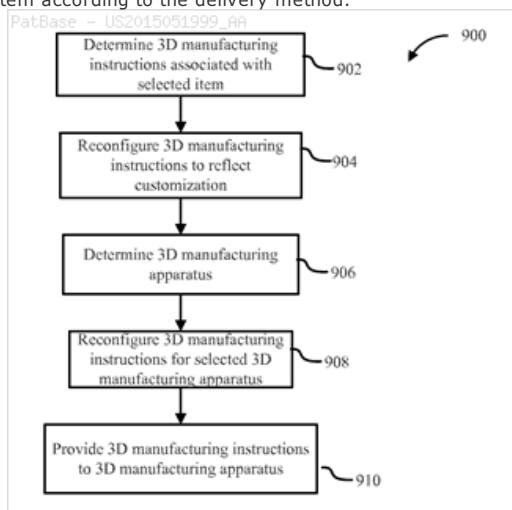
Abstract: Methods and systems can be provided for providing items manufactured on demand to users. A user request for an item can be received. The item can have 3D manufacturing instructions associated therewith. A delivery method for the item can be determined. A manufacturing apparatus can be selected to manufacture the item based on the 3D manufacturing instructions. Instructions can be sent to the manufacturing apparatus to manufacture the item based on the 3D manufacturing instructions. Delivery instructions can be provided for delivering the item according to the delivery method.

Classifications:

International (IPC 8-9): B29C64/00 B29C64/20 B29C67/00
B33Y50/00 G06F17/50 G06Q10/06 G06Q10/08 G06Q30/00
G06Q30/06 G06Q50/04 (Advanced/Invention);
B33Y80/00 (Advanced/Non-invention)

CPC: G06Q30/06 B29C64/25 B33Y50/00 B33Y80/00 G06Q10/06
G06Q30/0601 G06Q30/0603 G06Q30/0609 G06Q30/0621
G06Q30/0643 G06Q50/04 Y02P90/30 G06F30/00 G06Q10/08
G06Q10/0836 G06Q30/0619 G06Q30/0635 G06F30/20 B29C64/00
B29C64/20

US: 1/1 700/119 700/163 705/26.35 705/26.5 705/26.81 705/27.2
706/919 715/716 716/110

**Family:**

Publication number	Publication date	Application number	Application date
CN105874498 A	20160817	CN201480072140	20141110
EP3066630 A1	20160914	EP20140860735	20141110
EP3066630 A4	20170628	EP20140860735	20141110
IN201617019459 A	20160831	IN201617019459	20160606
JP2017500635 T2	20170105	JP20160528214T	20141110
US2015051999 AA	20150219	US20130076128	20131108
US2015052000 AA	20150219	US20130076135	20131108
US2015052023 AA	20150219	US20130076119	20131108
US2015052024 AA	20150219	US20130076127	20131108
US2015052025 AA	20150219	US20130076133	20131108
US2015379599 AA	20151231	US20150848098	20150908
US8412588 BA	20130402	US20100890334	20100924
US9159106 BA	20151013	US20130799877	20130313
US9672550 BB	20170606	US20130076133	20131108
US9684919 BB	20170620	US20130076119	20131108
US9858604 BB	20180102	US20130076128	20131108
US9898776 BB	20180220	US20130076127	20131108
US10049395 BB	20180814	US20150848098	20150908
WO15070176 A1	20150514	WO2014US64878	20141110
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Priority:

US20100890334 20100924 US20130799877 20130313 US20130076119 20131108
US20130076127 20131108 US20130076133 20131108 US20130076128 20131108
US20130076135 20131108 WO2014US64880 20141110 US20150848098 20150908

Probable Assignee: AMAZON TECHNOLOGIES INC

Assignee(s): (std): AU LEON L ; BEATTY BRYAN K ; SLOSBERG JEFFREY B ; MEYERS GREGORY J ; POWERS JEREMY E ;
CURTIS MICHAEL G ; BODELL COLIN ; AMAZON TECH INC

Assignee(s): AMAZON TECHNOLOGIES INC

Inventor(s): (std): MEYERS GREGORY J ; BEATTY BRYAN K ; POWERS JEREMY E ; AU LEON L ; SLOSBERG JEFFREY B ; CURTIS MICHAEL G ; BODELL COLIN ; REYES GUERRERO EDUARDO ; UHL ROBERT BENJAMIN ; KAPILA SAIPRASAD ; BODELL COLIN IAN ; HAYDEN SCOTT RANDALL ; LESSARD ERIC ; DANTON JACOB CONRAD ; APSLEY LINDA KNOWLTON

Agent(s): EIP; KNOBBE MARTENS OLSON AND BEAR LLP; KILPATRICK TOWNSEND AND STOCKTON LLP; KILPATRICK TOWNSEND AND STOCKTON; WYLIE ROGER ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

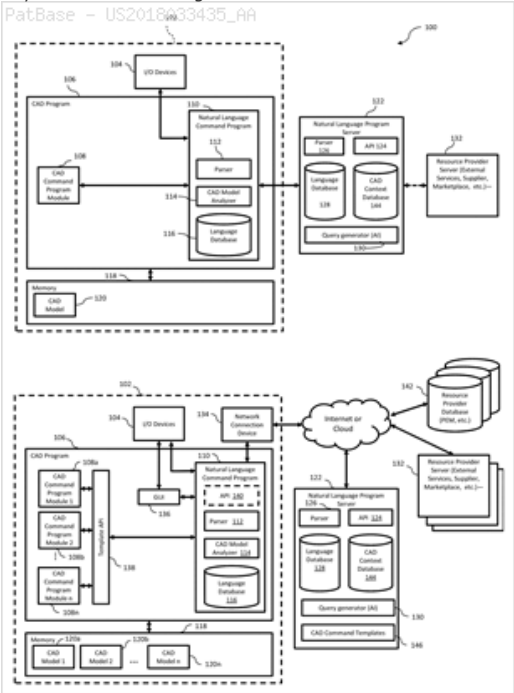
9) Family number: 65330422 (US2018033435A) © PatBase

Title: NATURAL LANGUAGE USER INTERFACE FOR COMPUTER-AIDED DESIGN SYSTEMS

Abstract: A natural language user interface for computer-aided design systems (CAD) comprises a natural language command module including a parser, language database and a CAD model analyzer, and a natural language server module including a second, increased capability parser, a second, preferably larger language database and a CAD context database. The CAD model analyzer analyzes and retrieves associated CAD model information related to a parsed voice command and the CAD context database provides specific CAD related contextual information to facilitate parsing and interpreting CAD specific commands. The natural language server program module may also include an artificial intelligence based query generator and communicate through a network or cloud with resource providers such as third-party market places or suppliers to generate queries for retrieval of third party supplied information necessary to respond to or execute CAD specific voice commands. The natural language user interface may query a user for missing information.

Classifications:

International (IPC 8-9): G01L15/00 G05B19/00 G05B19/4093 G06F17/27 G06F17/50 G06F3/06 G10L15/00 G10L15/18 G10L15/22 (Advanced/Invention); G06F3/0481 (Advanced/Non-invention)
CPC: G06F30/00 G10L15/00 G05B19/4093 G06F3/0481 G10L15/1815 G10L15/1822 G10L15/22 G10L2015/223 Y02P90/265 G05B2219/35453 G06F40/30 G10L15/26
US: 1/1 704/257 704/9



Family:

Publication number	Publication date	Application number	Application date
US2018033435 AA	20180201	US20170728275	20171009
US2018039253 AA	20180208	US20170787423	20171018
US2018067475 AA	20180308	US20170807153	20171108
US2018129188 AA	20180510	US20180861490	20180103
US9613020 BA	20170404	US20140486550	20140915
US10079016 BB	20180918	US20170728275	20171009
US10095217 BB	20181009	US20170807153	20171108
US10162337 BB	20181225	US20170787423	20171018
US10229679 BA	20190312	US20160388940	20161222

Priority:

US20140486550 20140915 US20160388940 20161222 US20170728275 20171009
US20170787423 20171018 US20170807153 20171108 US20180861490 20180103

Probable Assignee: DESPREZ LLC

Assignee(s): (std): BENKO LLC ; DESPREZ LLC

Assignee(s): GRUNFELD CONCEPTS LLC

Inventor(s): (std): CRONIN JOHN E ; JACOBS II JAMES L ; HUFFINES CHRISTOPHER M

Agent(s): DOWNS RACHLIN MARTIN PLLC; DRAYTON MICAH T; CALDWELL KEEGAN M; CALDWELL INTELLECTUAL PROPERTY LAW; CALDWELL INTELLECTUAL PROPERTY

10) Family number: 69744497 (US2019354915A) © PatBase

Title: METROLOGY SYSTEM FOR MEASUREMENT UNCERTAINTY ANALYSIS

Abstract: Certain aspects relate to systems and techniques for acquiring metrology inspection data of manufactured physical parts, identifying measurement uncertainty scores at various stages of the process of manufacturing and inspecting the physical parts, and leveraging the measurement uncertainty scores to evaluate manufacturing setups for the capability to make and/or inspect other parts. The scores can be specific to particular geometric features, and manufacturing setups can be identified for new parts based on the geometric features of those parts. To this end, the metrology system can receive inspection data and tolerance specifications in a variety of formats and convert the data into a standardized feature-based format. Standardized metrology data can be aggregated into appropriate subsets to identify uncertainty attributable to performance of a particular metrology inspector, manufacturing system, or metrology device with respect to specific geometric features of manufactured parts.

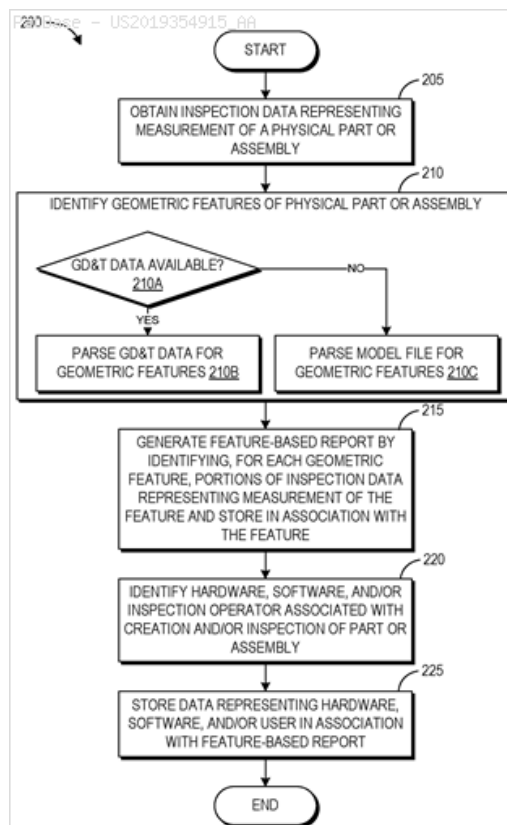
Classifications:

International (IPC 8-9): G05B19/404 G06F17/50 G06Q10/00

G06Q10/06 (Advanced/Invention)

CPC: G06Q10/06395 G06Q10/06398 G05B19/41875 G06Q10/0639

G05B19/404 Y02P90/22 G06F30/00



Family:

Publication number	Publication date	Application number	Application date
US2019354915 AA	20191121	US20170347791	20171102
WO18089252 A1	20180517	WO2017US59772	20171102

Priority:

US20160419038P 20161108 US20170347791 20171102 WO2017US59772 20171102

Probable Assignee: MINDS MECH LLC

Assignee(s): (std): MINDS MECH LLC

Assignee(s): MINDS MECHANICAL LLC

Inventor(s): (std): HOCKETT JACOB DANIEL

Agent(s): FULLER MICHAEL L

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JO JP KE KG KH KM KN KP KR KW KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

11) Family number: 69900512 (US2018150048A)

© PatBase

Title: METHODS AND SOFTWARE FOR REDUCING MACHINING EQUIPMENT USAGE WHEN MACHINING MULTIPLE OBJECTS FROM A SINGLE WORKPIECE

Abstract: Methods for providing a workpiece computer model including a plurality of objects defined in a body of material. A temporary support frame is provided as part of a two-sided machining process in which the workpiece is partially milled from an obverse side. The machine-control instructions are also based on one or more occupying structures added to the workpiece to fill in one or more excess unoccupied regions of the workpiece that would otherwise be machined away during machining of the objects. Providing such occupying structure(s) reduces the amount of machining that needs to be performed.

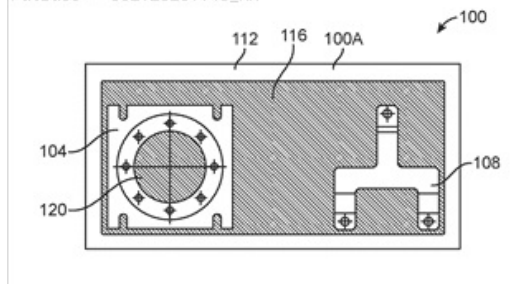
Classifications:

International (IPC 8-9): G05B19/19 G06F19/00 (Advanced/Invention)

CPC: G05B19/19 G05B2219/31466 G05B2219/31472 G05B19/4097

G05B2219/35162

US: 1/1 700/192

**Family:**

Publication number	Publication date	Application number	Application date
US2018150048 AA	20180531	US20180871191	20180115
US10401824 BB	20190903	US20180871191	20180115

Priority:

US20160322275P 20160414 US20170487395 20170413 US20180871191 20180115

Probable Assignee: PROTO LABS INC

Assignee(s): (std): RAPID MFG GROUP LLC

Assignee(s): PROTO LABS INC

Inventor(s): (std): STAHL CHRIS ; JACOBS II JAMES L ; STAHL CHRISTOPHER

Agent(s): CALDWELL INTELLECTUAL PROPERTY LAW

12) Family number: 30141525 (US2003126038A)

© PatBase

Title: AUTOMATED QUOTING OF MOLDS AND MOLDED PARTS

Abstract: Automated, custom mold manufacture for a part begins by creating and storing a collection of information of standard tool geometries and surface profiles machinable by each of the standard tool geometries. A customer sends a CAD file for the part to be molded to the system. The system assesses the CAD file to determine various pieces of mold manufacturing information. One or more acceptability criteria are applied to the part, such as whether the part can be manufactured in a two-piece, straight-pull mold, and whether the mold can be by CNC machined out of aluminum. If not, the system sends a file to the customer graphically indicating which portions of the part need modification to be manufacturable. The system provides the customer with a quotation form, that allows the customer to select several parameters, such as number of cavities, surface finish and material, which are independent of the shape of the part. The quotation module then provides the customer with the cost to manufacture the mold or a number of parts. The quotation is based in part upon mold manufacturing time as automatically assessed from the part drawings and based in part on the independent parameters selected by the customer. The customer's part is geometrically assessed so the system automatically selects appropriate tools and computes tool paths for mold manufacture. In addition to the part cavity, the system preferably assesses the parting line, the shutoff surfaces, the ejection pins and the runners and gates for the mold. The preferred system then generates CNC machining instructions to manufacture the mold, and the mold is manufactured in accordance with these instructions.

Classifications:

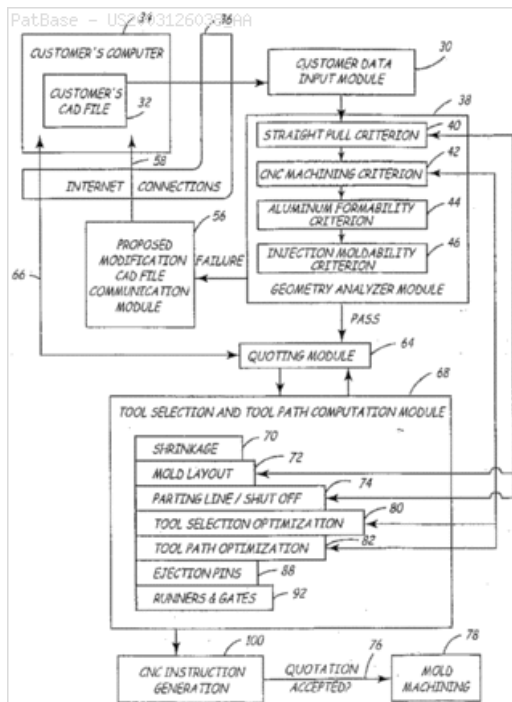
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International (IPC 1-7): B29C39/00 G06F17/60 G06F19/00

CPC: B29C33/3835 G06Q30/06 G06Q30/0601 G06Q10/087 G06Q30/02 G06Q30/0611 G06Q30/0621 G06Q30/08 G06Q30/00 G06Q10/04 B22C19/04

European: B22C19/04 B29C33/38F G06F17/60B G06Q10/04 G06Q10/087 G06Q10/08E G06Q30/02 G06Q30/06 G06Q30/0601 G06Q30/0611 G06Q30/0621 G06Q30/08

US: 264/401 345/420 425/503 700/197 700/197P 700/200 700/200P 700/200S 700/97 700/98 700/98P 705/26 705/26.1 705/26.100P 705/26.4 705/26.400P 705/26.5 705/26.500S 705/26.63 705/26P 705/27 705/27.1

**Family:**

Publication number	Publication date	Application number	Application date
DE112007002554 T5	20091105	DE200711002554T	20071024
GB200906719 A0	20090603	GB20090006719	20071024
GB2455953 A1	20090701	GB20090006719	20071024
GB2455953 B2	20120404	GB20090006719	20071024
US2003126038 AA	20030703	US20020325286	20021219

US2005096780 AA	20050505	US20040970130	20041021
US2005125092 AA	20050609	US20050035648	20050114
US2007038531 AA	20070215	US20060586379	20061025
US2009125418 AA	20090514	US20090354546	20090115
US2011060439 AA	20110310	US20100902955	20101012
US6701200 BA	20040302	US20020056755	20020124
US6836699 BB	20041228	US20020325286	20021219
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US7840443 BB	20101123	US20060586379	20061025
US8140401 BB	20120320	US20090354546	20090115
US8239284 BB	20120807	US20100902955	20101012
WO06078300 A1	20060727	WO2005US19013	20050526
WO08052090 A2	20080502	WO2007US82457	20071024
WO08052090 A3	20080626	WO2007US82457	20071024

Priority:

US20010344187P	20011227	US20020056755	20020124	US20020386658P	20020605
US20020325286	20021219	US20040970130	20041021	US20050035648	20050114
US20060586379	20061025	WO2007US82457	20071024	US20090354546	20090115
US20100902955	20101012				

Probable Assignee: PROTOMOLD CO INC

Assignee(s): (std): GILBERT JOHN M ; KUBICEK MARK R ; LUKIS LAWRENCE J ; PROTO LABS INC ; PROTOMOLD CO INC ; PROTOMOLD COMPANY INC ; PROTOMOLD COMPANY THE INC ; WALLS MANNING CHRISTOPHER

Assignee(s): WALLS FARGO BANK NATIONAL ASSOCIATION ; THE PROTOMOLD COMPANY INC

Inventor(s): (std): WALLS MANNING CHRISTOPHER ; GILBERT JOHN MARK ; DREIZIN YURI ARNOLDVICH ; LUKIS LAWRENCE JOSEPH ; KUBICEK MARK R ; GILBERT JOHN M ; DREIZIN YURI A ; LUKIS LAWRENCE J

Inventor(s): GILBERT JOHN ; DREIZIN YURI ; KUBICEK MARK ; LUKIS LAWRENCE ; MARK R KUBICEK ; LAWRENCE J LUKIS ; CHRISTOPHER WALLS MANNING

Agent(s): SHEWCHUK IP SERVICES; SHEWCHUK IP SERVICES LLC; SHEWCHUK JEFFREY D; JEFFREY D

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

13) Family number: 77587530 (US10556309B)

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Title: METHODS OF SUBTRACTIVELY MANUFACTURING A PLURALITY OF DISCRETE OBJECTS FROM A SINGLE WORKPIECE USING A REMOVABLE FIXATING MATERIAL

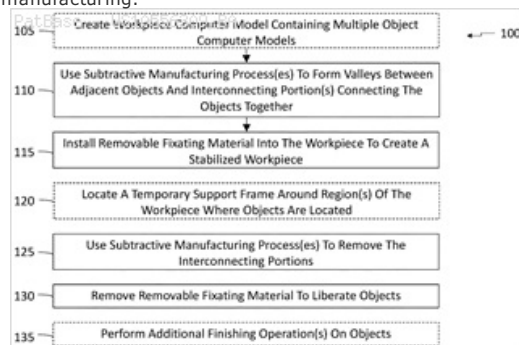
Abstract: Methods involving adding a removable fixating material to a partially manufactured workpiece to stabilize a plurality of partially formed objects therein for subsequent manufacturing. In one example, valleys are formed in a workpiece between adjacent partially formed objects so that interconnecting portions remain to interconnect the partially formed objects. Then, the removable fixating material is installed in the valleys, and once the removable fixating material has hardened, the workpiece is further processed to at least remove the interconnecting portions. In some embodiments, a mold is used to install the removable fixating material into the workpiece. In some embodiments, a prefabricated temporary frame is used for installing the removable fixating material into the workpiece. In some embodiments, a temporary frame is formed from the workpiece along with the plurality of objects during manufacturing.

Classifications:

International (IPC 8-9): B23C3/10 B23Q3/06

B29C65/70 (Advanced/Invention)

CPC: B23Q3/061 B23C3/10 B29C65/70 B23C2220/12



Family:

Publication number	Publication date	Application number	Application date
US10556309 BA	20200211	US20170467111	20170323

Priority:

US20160312532P	20160324	US20170467111	20170323
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Probable Assignee: BENKO LLC

Assignee(s): (std): BENKO LLC ; PROTO LABS INC

Assignee(s): RAPID MFG GROUP LLC ; GRUNFELD CONCEPTS LLC

Inventor(s): (std): JACOBS II JAMES L ; STAHL CHRIS

Agent(s): CALDWELL INTELLECTUAL PROPERTY LAW

14) Family number: 70238557 (US2018181107A)

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Title: METHODS AND SOFTWARE FOR PROVIDING GRAPHICAL REPRESENTATIONS OF A PLURALITY OF OBJECTS IN A CENTRAL THROUGH OPENING

Abstract: Methods and software for generating machine-control instructions for controlling subtractive manufacturing equipment to form a plurality of objects from a single workpiece. In some embodiments, the machine-control instructions are for milling equipment that mills the objects from a single body of material by milling material from obverse and reverse sides of the body of material. Milling from the obverse side forms valleys in the obverse side and leaves interconnecting portions that connect together the plurality of objects. A removable fixating material is added to the valleys for holding the objects firmly in place relative to one another for milling from the reverse side. After the removable fixating material has hardened, milling from the reverse side removes the interconnecting portions. Milling operations from the obverse and reverse sides can include operations in addition to the forming of the valleys and removing of the interconnecting portions.

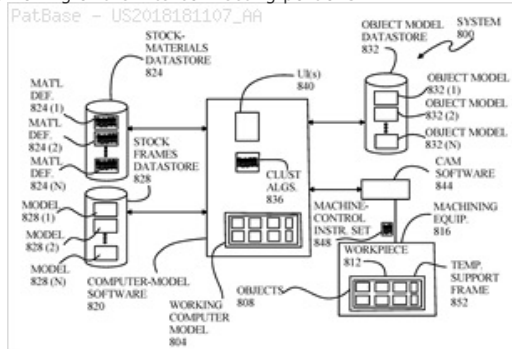
Classifications:

International (IPC 8-9): G05B19/4069

G05B19/4097 (Advanced/Invention)

CPC: G05B19/4069 G05B2219/50144 G05B19/4097

US: 1/1 700/186



Family:

Publication number	Publication date	Application number	Application date
US2018181107 AA	20180628	US20170857312	20171228
US10545481 BB	20200128	US20170857312	20171228

Priority:

US20160439596P 20161228 US20170857312 20171228

Probable Assignee: PROTO LABS INC

Assignee(s): (std): PROTO LABS INC ; RAPID MFG GROUP LLC

Inventor(s): (std): JACOBS II JAMES L

Agent(s): CALDWELL INTELLECTUAL PROPERTY LAW

15) Family number: 56591639 (US2014156049A)

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Title: SYSTEMS AND METHODS FOR CONSTRUCTION ABSTRACTION

Abstract: A frame design and a sheathing design for a design model may be produced by the systems and methods described herein. A processor in communication with a database may receive a design model comprising building specifications. The processor may define a panel in the design model and generate the frame design and the sheathing design for the panel.

Classifications:

International (IPC 8-9): E04C2/00 G05B15/02 G05B19/4097

G06F17/50 (Advanced/Invention);

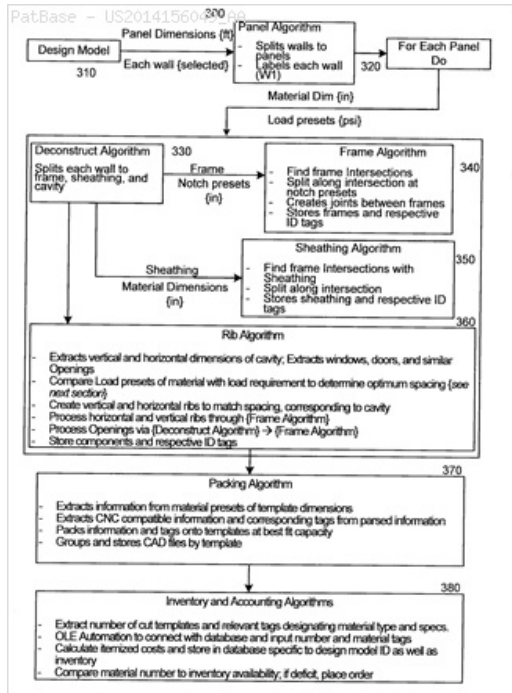
E04B2/60 E04F13/14 F16B12/02 (Advanced/Non-invention)

CPC: G05B19/4097 G05B2219/45174 G05B2219/45234

G05B2219/49389 Y10T29/49629 E04B2/60 E04C2/00 E04F13/14

F16B12/02 G06F30/00

US: 1/1 700/97 703/1



Family:

Publication number	Publication date	Application number	Application date
US2014156049 AA	20140605	US20130089817	20131126
US2018210422 AA	20180726	US20180925395	20180319
US9939807 BB	20180410	US20130089817	20131126
WO14085359 A1	20140605	WO2013US71780	20131126

Priority:

US20120732212P 20121130 US20130089817 20131126 US20180925395 20180319

Probable Assignee: WALKER JR LYNWOOD J**Assignee(s):** (std): WALKER JR LYNWOOD J ; WALKER LYNWOOD J**Inventor(s):** (std): WALKER LYNWOOD J ; WALKER JR LYNWOOD J**Agent(s):** DLA PIPER LLP US; LAZER DALE S ET AL**Designated states:** AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW**16) Family number: 43432653 (US2009164039A)**

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Title: SECURE ROBOTIC OPERATIONAL SYSTEM

Abstract: Methods and systems for a secure robotic operational system include but are not limited to receiving an authorization associated with a directive to perform robotic operational tasks regarding one or more objects; verifying the authorization associated with the directive; and controlling operation of the robotic operational system via controlling a plurality of robotic elements, each robotic element of the plurality of robotic elements individually and/or in combination performing one or more functions in accordance with the authorization.

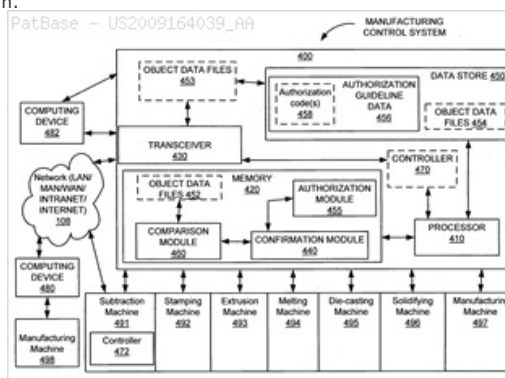
Classifications:

International (IPC 8-9): G05B19/04 G05B19/042 G06F12/14 G06F19/00 G06F21/00 G06F21/10 G06F7/04 G06Q10/00 G06Q10/06 G06Q50/04 G06Q50/18 H04L29/06 H04L9/00 H04L9/32 (Advanced/Invention); G06F19/00 H04L29/06 (Advanced/Non-invention); G06F19/00 G06F21/00 G06F7/02 G06Q10/00 H04L9/00 (Core/Invention); G06F19/00 (Core/Non-invention)

CPC: H04L9/3226 H04L2209/603 H04L2209/805 H04L2209/84 H04L9/32 B33Y50/00 B33Y50/02 B33Y70/00 H04L29/06 H04L63/10 G06Q50/04 G06Q50/18 Y02P90/30 G06Q50/184 G05B19/0426 G05B2219/24167 G06F21/10 G06F21/629 G06F2221/0746 G06Q10/06 H04L63/102

European: G05B19/042P G06F21/10 G06F21/62C G06Q10/06 G06Q50/04 G06Q50/18 G06Q50/184 H04L9/32 S05B219/24167 S06F221/07E T04L63/10 T04L63/10B

US: 1/1 340/5.61 340/5.610S 700/103 700/116 700/117 700/117P 700/145 700/159 700/245 700/245S 700/95 700/95P 700/97 700/98 700/98S 705/310 705/310S 705/59 705/59P 705/59S 705/7 705/7S 713/165 713/168 713/189 726/1 726/21 726/21P 726/21S 726/29 726/29P 726/30 726/30P 726/31

**Family:**

Publication number	Publication date	Application number	Application date
US2009164039 AA	20090625	US20080290001	20081023
US2009164379 AA	20090625	US20080288336	20081017
US2009165126 AA	20090625	US20080012504	20080131
US2009165127 AA	20090625	US20080287719	20081010
US2009165147 AA	20090625	US20070005162	20071221
US2009292389 AA	20091126	US20090321365	20090116
US2010031351 AA	20100204	US20080079921	20080327
US2010031374 AA	20100204	US20080287704	20081009
US2011178619 AA	20110721	US20090321385	20090116
US8286236 BB	20121009	US20080012504	20080131
US8429754 BB	20130423	US20070005162	20071221
US8752166 BB	20140610	US20080287704	20081009
US9071436 BB	20150630	US20090321365	20090116
US9128476 BB	20150908	US20080290001	20081023
US9626487 BB	20170418	US20080079921	20080327
US9818071 BB	20171114	US20080287719	20081010

Priority:US20070005162 20071221 US20080012504 20080131 US20080079921 20080327
US20080287704 20081009 US20080287719 20081010 US20080288336 20081017
US20080290001 20081023 US20090321365 20090116 US20090321385 20090116**Probable Assignee:** SECURE3DP AND PTE LTD**Assignee(s):** (std): INVENT SCIENCE FUND I LLC ; INVENTION SCIENCE FUND I LLC ; JUNG EDWARD K Y ; RINALDO JR JOHN D ; LEVIEN ROYCE A ; MALAMUD MARK A ; LORD ROBERT W ; TEGREENE CLARENCE T ; WOOD JR LOWELL L ; SEARETE LLC ; LORD RICHARD T**Assignee(s):** SECURE3DP AND PTE LTD ; SEARETE LLC A LIABILITY OF STATE DELAWARE CORP LTD ; ADDITIVE MFG PURSUITS LLC ; SEARETE LLC A LIABILITY OF STATE OF DELAWARE CORP LTD ; JUNG EDWARD KY**Inventor(s):** (std): LORD RICHARD T ; TEGREENE CLARENCE T ; RINALDO JR JOHN D ; JUNG EDWARD K Y ; MALAMUD MARK A ; LORD ROBERT W ; WOOD JR LOWELL L ; LEVIEN ROYCE A**Inventor(s):** JUNG EDWARD KY**Agent(s):** SEARETE LLC CLARENCE T TEGREENE; LEE AND HAYES PLLC; SUITER SWANTZ PC LLO**17) Family number: 15436867 (US2003085921A)**

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Title: NETWORK-BASED DESIGN SYSTEMS AND METHODS

Abstract: A network based product design system and method allows product design. The system comprises a central processing unit is for product design; at least one communication link allows selective two-way communication to the central processing means; and a network selectively interconnects and communicates the central processing unit to at least one party through the at least one communication link. Each party that is connected to the central processing unit is capable of providing input regarding a product design, the network being capable of allowing the input to be simultaneously viewed by each party so that input made by one party is capable of being accessed by at least one other party. The method for designing a product over a network comprises displaying a model on a central processing unit, the model being representative of the product that is to be designed; permitting two-way communication to the central processing unit over communication links; and selectively interconnecting and communicating the product design through the central processing unit to at least one party over the at least one communication links.

Classifications:

International (IPC 8-9): B29C33/38 G05B19/418

G06F17/50 (Advanced/Invention);

B29C33/38 G05B19/418 G06F17/50 (Core/Invention)

International (IPC 1-7): G06F17/50 G06F3/00 G09G5/00

CPC: G06F30/00 G06F2111/02 B29C33/3835 G05B19/41845

G05B19/4185 G05B2219/32238 G05B2219/35008 G05B2219/35034

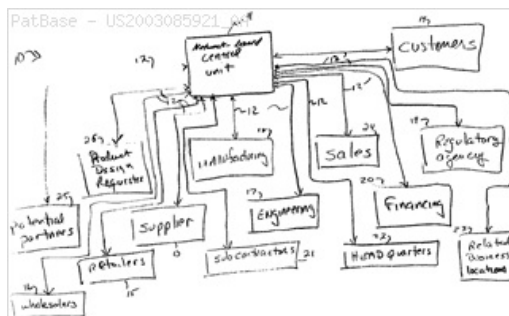
Y02P90/16 Y02P90/18 Y02P90/265 Y10S715/964 Y10S715/97

European: B29C33/38F G05B19/418M G05B19/418N G06F17/50

S05B219/32238 S05B219/35008 S05B219/35034 S06F217/04

US: 345/733 345/751 345/771 345/964 345/970 700/95 709/205

715/733 715/751 715/751P 715/771 715/964 715/970



Family:

Publication number	Publication date	Application number	Application date
AU200111027 A1	20010604	AU20010011027	20001024
AU200111027 A5	20010604	AU20010011027D	20001024
US2003085921 AA	20030508	US19990449431	19991124
US6741265 BB	20040525	US19990449431	19991124
WO0139050 A2	20010531	WO2000US29296	20001024
WO0139050 A3	20020711	WO2000US29296	20001024

Priority:

US19990449431 19991124 WO2000US29296 20001024

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Assignee(s): GENERAL ELECTRIC CO ; GENERAL ELECTRIC COMPANY ; GHOSH ASISH ; SABIC INNOVATIVE PLASTICS IP BV ; WHEELER SCOTT THOMAS ; AVERY JOHN ARLEY ; CITIBANK NA ; CITIBANK NA COLLATERAL AGENT AS

Inventor(s): (std): WHEELER SCOTT THOMAS ; AVERY JOHN ARLEY ; GHOSH ASISH

Inventor(s): SCOTT THOMAS WHEELER ; ASISH GHOSH ; JOHN ARLEY AVERY

Designated states: AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CU CY CZ DE DK EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG UZ VN YU ZW

18) Family number: 28182921 (US2002035450A)

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Title: NETWORK-BASED SYSTEM FOR THE MANUFACTURE OF PARTS WITH A VIRTUAL COLLABORATIVE ENVIRONMENT FOR DESIGN, DEVELOPMENT AND FABRICATOR SELECTION

Abstract: The invention relates generally to a comprehensive, integrated computer-based system and method for undertaking an engineering design and development effort in a virtual collaborative environment, identifying qualified fabricators for manufacturing a part design based on fabricator capability information stored in a global registry database substantially maintained by the fabricators themselves, and conducting a virtual bidding process whereby electronic representations of three dimensional model and specification data are provided by a central server. The central server further supports the bidding process by providing quasi-real time audio, video and graphics, and the contracts negotiation and formalization steps.

Classifications:

International (IPC 8-9): G05B19/4099 G06F15/00 G06F15/163

G06F17/50 G06Q30/00 G06Q30/06 (Advanced/Invention)

International (IPC 1-7): G02F G05B19/4099 G06F1/00 G06F1/750

G06F15/00 G06F15/163 G06F17/50 G06F17/60

CPC: G06F30/00 G06F2111/02 G05B19/4099 G05B2219/32038

G05B2219/32126 G05B2219/35008 G06Q30/06 Y02P90/265

Y10S707/99945 Y10S707/99948

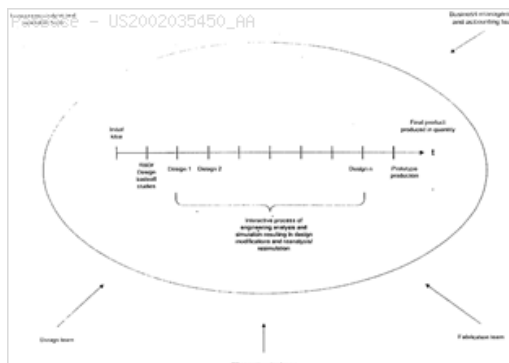
European: G05B19/4099 G06F17/50 G06F17/60B G06F17/60B4

G06Q30/06 S05B219/32038 S05B219/32126 S05B219/35008

S06F217/04

US: 703/1 703/1P 703/6 707/104 707/104.1 707/999.104

707/999.107



Family:

Publication number	Publication date	Application number	Application date
AU2000035191 A1	20001004	AU200000035191	20000310
AU2000035191 A5	20001004	AU200000035191	20000310
CA2368114 AA	20010914	CA20002368114	20000310
EP1166195 A2	20020102	EP20000913822	20000310
EP1166195 A4	20041201	EP20000913822	20000310
IN204676 B	20070615	IN2001MN01038	20010904

US2002035450 AA	20020321	US20010903522	20010713
US6295513 BA	20010925	US19990410619	19991001
US6928396 BB	20050809	US20010903522	20010713
WO0055705 A2	20000921	WO2000US06109	20000310
WO0055705 A3	20010525	WO2000US06109	20000310
WO0055705 C2	20020711	WO2000US06109	20000310

Priority:

US19990270007 19990316 US19990311150 19990513 US19990410619 19991001
WO2000US06109 20000310 US20010903522 20010713

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Assignee(s): (std): EAGLE ENGINEERING OF AMERICA ; EAGLE ENGINEERING OF AMERICA I ; EAGLE ENGINEERING OF AMERICA INC

Assignee(s): EAGLE ENGINEERING OF AMERICA SUITE ; INTELLECTUAL VENTURES FUND 83 LLC ; THACKSTON JAMES D ; CHEMTRON RESEARCH LLC ; DOLSIAN TRI IT LLC

Inventor(s): (std): THACKSTON JAMES D

Inventor(s): JAMES D THACKSTON

Agent(s): SMART AND BIGGAR; HUNTON AND WILLIAMS; MCGUIREWOODS LLP

Designated states: AE AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CR CU CY CZ DE DK DM DZ EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG UZ VN YU ZA ZW