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(71) Applicant *(for all designated States except US)*: **BRIGHAM YOUNG UNIVERSITY** [US/US]; A-285 Asb, Provo, Utah 84602 (US).

(72) Inventors; and
(75) Inventors/Applicants *(for US only)*: **RED, W. Edward** [US/US]; 3710 North 920 East, Provo, Utah 84604 (US). **JENSEN, C. Gregory** [US/US]; 498 East 2600 North, Provo, Utah 84604 (US).

(74) Agent: **HARDMAN, Thomas M.**; Madson & Austin, 15 W. South Temple, Suite 900, Salt Lake City, Utah 84101 (US).

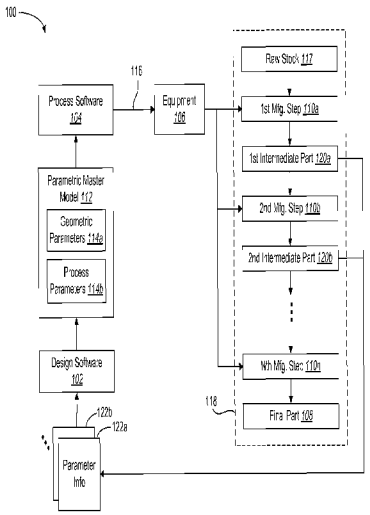
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(54) Title: SYSTEMS AND METHODS FOR EFFICIENTLY IMPLEMENTING AN N-STEP MANUFACTURING PROCESS FOR PRODUCING A MECHANICAL PART



(57) Abstract: A method for efficiently implementing an N-step manufacturing process for producing a mechanical part may include creating a parametric master model that represents a part to be produced in an N-step manufacturing process. The method may also include using the parametric master model to create process plans for the N-step manufacturing process. After manufacturing step i of the N-step manufacturing process, the method may include receiving information concerning values of parameters in the parametric master model as they exist after manufacturing step i of the N-step manufacturing process. Updates to the parametric master model may be made based on the information that was received. The process plans corresponding to manufacturing step i+1 of the N-step manufacturing process may be updated based on the updated parametric master model.

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 07/67304

A. CLASSIFICATION OF SUBJECT MATTER
IPC(8) - G06F 19/00 (2007.10)
USPC - 700/182
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)
USPC: 700/182

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
USPC: 700/97, 108, 182 (text search - see terms below)

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
PubWEST(USPT,PGPB,EPAB,JPAB); DialogPRO(Engineering); Google Scholar
Search Terms Used: CAD/CAM, parametric master model, manufacturing process plan, geometry/process parameter, tolerance perturbation, updating/adjusting parameters

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 2003/0114945 A1 (HIRANO et al.) 19 June 2003 (19.06.2003) entire document (especially Fig. 5, abstract, para [0014], para [0042]), para [0046], para [0071], para [0075]-[0078], para [0097]-[0100])	1, 3-9, 11-15, 17-20 ---------- 2, 10, 16
Y	US 6,940,037 B1 (KOVACEVIC et al.) 06 September 2005 (06.09.2005) entire document (especially col 1, ln 48-col 2, ln 17)	2, 10, 16

☐ Further documents are listed in the continuation of Box C. ☐

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"A" document defining the general state of the art which is not considered to be of particular relevance
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"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
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