



(43) International Publication Date
22 September 2005 (22.09.2005)

PCT

(10) International Publication Number
WO 2005/086965 A3

(51) International Patent Classification:

G05B 19/18 (2006.01)	G01F 7/00 (2006.01)
G05B 15/02 (2006.01)	G01F 17/00 (2006.01)
G05B 13/02 (2006.01)	G01F 23/00 (2006.01)
G06F 19/00 (2006.01)	G01N 37/00 (2006.01)
B29C 39/00 (2006.01)	G04F 1/00 (2006.01)
B29C 45/00 (2006.01)	B28B 17/00 (2006.01)
G06G 7/66 (2006.01)	G01N 27/00 (2006.01)
G01F 1/00 (2006.01)	

(21) International Application Number:

PCT/US2005/008254

(22) International Filing Date: 11 March 2005 (11.03.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/552,483	11 March 2004 (11.03.2004)	US
10/800,079	11 March 2004 (11.03.2004)	US

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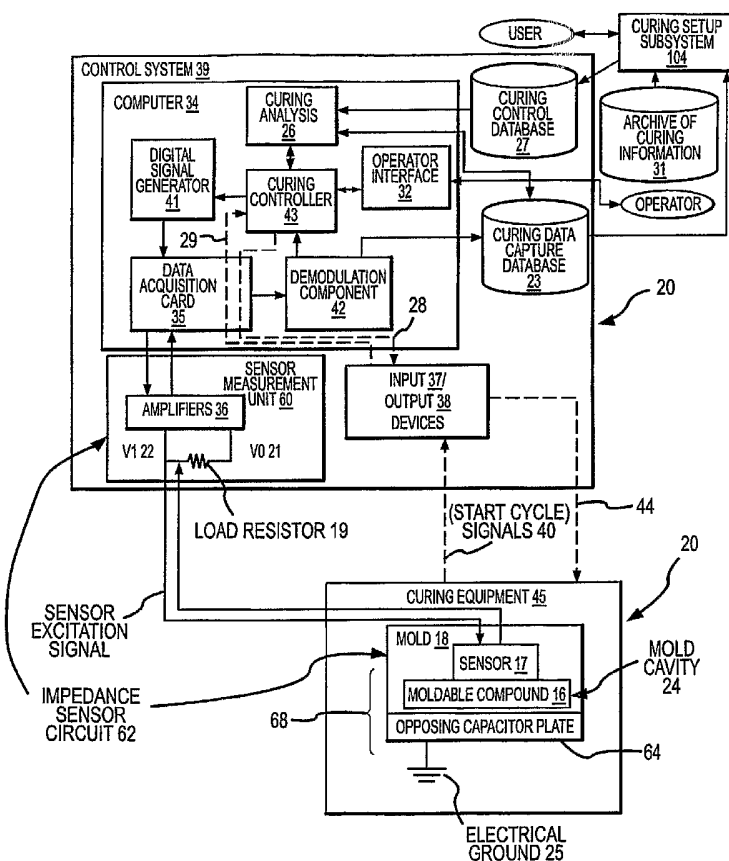
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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,

[Continued on next page]

(54) Title: A PROCESS AND APPARATUS FOR IMPROVING AND CONTROLLING THE CURING OF NATURAL AND SYNTHETIC MOLDABLE COMPOUNDS



(57) Abstract: A process for curing a moldable compound under a plurality of curing conditions by: (1) obtaining time dependent data streams of dielectric or impedance values from a plurality of sensors distributed within a curing mold, wherein the moldable compound is a dielectric for each of the sensors; (2) determining impedance related measurements from the data streams for the plurality of sensors; (3) determining predictive and/or corrective curing actions for enhancing the curing process using the impedance related measurements for the plurality of sensors; and (4) controlling the mass production curing of parts to obtain cured parts having one or more desired properties.

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ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,
SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,
GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- *with international search report*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

(88) Date of publication of the international search report:
27 July 2006

(15) Information about Correction:
Previous Correction:

see PCT Gazette No. 46/2005 of 17 November 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/08254

A. CLASSIFICATION OF SUBJECT MATTER
 IPC: **G05B 19/18**(2006.01),**15/02**(2006.01),**13/02**(2006.01);**G06F 19/00**(2006.01);**B29C 39/00**(2006.01),**45/00**(2006.01);**G06G 7/66**(2006.01);**G01F 1/00**(2006.01),**7/00**(2006.01),**17/00**(2006.01),**23/00**(2006.01);**G01N 37/00**(2006.01);**G04F 1/00**(2006.01)
 B28B 17/00(2006.01);G01N 27/00(2006.01)
 USPC: 700/2,9,11,12,19,56,95,108-110,198-200,202-205;702/81-84,176;425/135;264/40.1-40.7;324/71.1
 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)
 U.S. : 700/2,9,11,12,19,56,95,108-110,198-200,202-205;702/81-84,176;425/135;264/40.1-40.7;324/71.1

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)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,219,498 (KELLER et al) 15 June 1993 (15.06.1993), whole document	1,6-12,15,16
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Y		3-5,13-14
Y	US 6,490,501 B1 (SAUNDERS) 3 December 2002 (03.12.2002), column 9, lines 7-18.	13-14
Y	US 4,773,021 (HARRIS et al) 20 September 1988 (20.09.1988), column 4, line 63 - column 5, line 26.	3
Y	US 4,723,908 (KRANBUEHL) 9 February 1988 (09.02.1988), column 4, lines 13-31; column 5, lines 50-63.	4-5

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Date of the actual completion of the international search
 22 April 2006 (22.04.2006)

Date of mailing of the international search report
23 MAY 2006

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