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Declarations under Rule 4.17:

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*
- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

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INTERNATIONAL SEARCH REPORT

International application No
PCT/US2008/008871

A. CLASSIFICATION OF SUBJECT MATTER

INV. B01J8/18 B01J8/24 C08F10/00 B01J19/00

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)

B01J C08F

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 practical, search terms used)

EPO-Internal, COMPENDEX, INSPEC, 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	WO 03/051929 A1 (UNIVATION TECH LLC [US]) 26 June 2003 (2003-06-26) abstract column 1, line 12 - line 29 column 1, line 62 - line 67 column 4, line 17 - line 21 column 6, line 39 - line 51; claims -----	1-21
X	WO 2006/107437 A1 (UNIVATION TECH LLC [US]; MARKEL ERIC [US]; MUHLE MICHAEL [US]) 12 October 2006 (2006-10-12) abstract paragraph [0002] paragraph [0010] - paragraph [0019] paragraph [0029] - paragraph [0035] paragraph [0041] - paragraph [0042] paragraph [0045] - paragraph [0049] paragraph [0051]; claims; figures ----- -/--	1-42

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

☒ 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 document 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

28 July 2009

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Name and mailing address of the ISA/

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INTERNATIONAL SEARCH REPORT

International application No

PCT/US2008/008871

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 826 513 B1 (KUMAR VIRUTHIAMPARAMBATH RAVI [IN] ET AL) 30 November 2004 (2004-11-30) cited in the application abstract paragraph [0005] - paragraph [0006] paragraph [0013] - paragraph [0015] paragraph [0019] - paragraph [0033] paragraph [0044] claims; figures; examples	1-42
X	Y. STAVROPOULOS, C. KIPARISSIDES: "Development of a prototype MSPC software package for on-line process monitoring and statistical quality control" COMPUT. APPL. ENG. EDUC., vol. 9, no. 3, 19 October 2001 (2001-10-19), pages 157-170, XP002538968 abstract page 158, left-hand column, paragraph 1 page 160, left-hand column, paragraph 1 - right-hand column, paragraph 1 page 164, right-hand column, paragraph 2 - page 167, right-hand column, paragraph 2	22-42
X	US 6 384 157 B1 (CAI PING [US] ET AL) 7 May 2002 (2002-05-07) cited in the application abstract column 2, line 66 - column 3, line 32 column 6, line 39 - column 8, line 42; claims	22-42
A	US 2004/083028 A1 (VAIDYANATHAN RAMASWAMY [US] ET AL) 29 April 2004 (2004-04-29) abstract paragraph [0001] paragraph [0020] - paragraph [0021] paragraph [0029] claims; figures; examples	1-42

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2008/008871

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.:
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 allsearchable 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 reportcovers 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.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

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

1. claims: 1-21

Independent claim 1 (and dependent claims 2-21) relate to a method for monitoring a resin-producing polymerization reaction in a fluidized bed reactor system comprising the steps of monitoring at least one reaction parameter, transforming said parameter in order to generate frequency-domain data and determining from this data at least one indication of resin stickness, or imminence of unsafe or undesired operating conditions.

2. claims: 22-42

Independent claim 22 (and dependent claims 23-42) relates to a method for monitoring a resin-producing polymerization reaction in a fluidized bed reactor system comprising the steps of monitoring at least one reaction parameter and determining kurtosis of at least two subsets of reaction data including one of a sequence of different time intervals.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2008/008871

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
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			BR	0215011 A		03-11-2004
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