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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))

[Continued on next page]

(54) Title: DECLARATIVE WORKFLOW DESIGNER

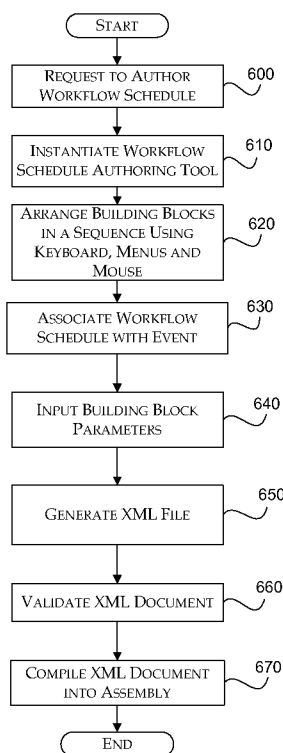


Fig. 6

(57) **Abstract:** A workflow designer enables a user to author a workflow by arranging building blocks in a particular order using a combination of a graphical designer and a rules based editor. The building blocks are encapsulated and displayed graphically to the user. The building blocks may correspond to events, conditions or actions that may include complex logic, sub steps, looping and parallel branching. Each building block is associated with source code that defines an action to be taken when the building block is processed. The workflow designer may be used to implement logic to provide flexibility and customization for the workflow schedule. Validation may also be performed to determine that all the required parameters have been properly set for the building blocks as well as to determine whether the building blocks are properly arranged.

WO 2009/006064 A3



— *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))* — *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 8 G06F 17/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models since 1975.
Japanese utility models and applications for utility models since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

e-KIPASS "workflow design, rule based editor, design surface, building blocks, conditional blocks, mark-up language document, xml"

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JP 2002041744 A (RANSEPUTO KK) 08 February 2002 See abstract; figures 1-4; pages 2-3; claims 1-8	1-20
Y	KR 1020060087997 A (MICROSOFT CORP.) 03 August 2006 See abstract; figures 1-4; pages 2-5; claims 1-20	1-20
A	US 06424948 B1 (Dong; Guozhu et al.) 23 July 2002 See abstract; figures 1-2; columns 1-2; claims 1-28	1-20
A	KR 1020070011973 A (SAMSUNG S.D.S CO., LTD.) 25 January 2007 See abstract; figures 1-10; pages 2-4; claims 1-18	1-20

 Further documents are listed in the continuation of Box C. See patent family annex.

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
JP 2002-041744 A	08.02.2002	JP 2002-041744	08.02.2002

KR 10-2006-0087997 A	03.08.2006	CN 1766835 A EP 1643429 A1 JP 2006-107481 JP 2006-107481 A US 2006-074733 A1	03.05.2006 05.04.2006 20.04.2006 20.04.2006 06.04.2006

US 6424948 B1	23.07.2002	US 6424948	23.07.2002

KR 10-2007-0011973 A	25.01.2007	KR 10-2007-0011973	25.01.2007