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(71) Applicant: MICROSOFT CORPORATION [US/US]; One Microsoft Way, Redmond, WA 98052 (US).

(72) Inventors: AMBLER, Christopher; Apartment S-294, 17776 N.E. 90th Street, Redmond, WA 98052 (US). WALLACE, Andrew; 4427 175th Place S.E., Bellevue, WA 98006 (US).

(74) Agents: NYDEGGER, Rick, D. et al.; Workman, Nydegger & Seeley, 1000 Eagle Gate Tower, 60 East South Temple, Salt Lake City, UT 84111 (US).

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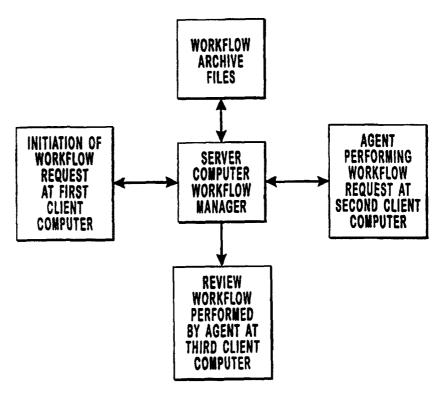
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(54) Title: SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT FOR WORKFLOW PROCESSING USING MESSAGING WITH MIME MULTIPART CONTENT TYPE

(57) Abstract

A client computer in communications network with a server computer assembles a record set that has a MIME declaration header with a multipart content type and a content sub-type indicative of a workflow media type. The first client computer also assembles a binary file having therein an encoded workflow specification. The record set is then transmitted with the binary file to the communications network. A second client computer on communications network receives both the record set and the binary file and begins decoding the workflow specification. The second client computer uses an application program to execute the decoded workflow specification so as to perform all or a portion of the workflow process that is specified therein. The workflow specification is optionally written in eXtensible Mark-up Language (XML).



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A,P	US 5,930,512 A (BODEN et al) 27 Ju	1-28						
A,P	US 5,978,836 A (OUCHI) 02 Noven Invention	1-28						
A,P	US 6,016,478 A (ZHANG et al) 18 Ja	1-28						
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