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12/820,735 22 June 2010 (22.06.2010) US(71) Applicant (for all designated States except US): **INTERNATIONAL BUSINESS MACHINES CORPORATION** [US/US]; New Orchard Road, Armonk, New York 10504 (US).(71) Applicant (for MG only): **IBM UNITED KINGDOM LIMITED** [GB/GB]; PO Box 41, North Harbour, Portsmouth Hampshire PO6 3AU (GB).

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(54) Title: EXTENDING THE NUMBER OF GENERAL PURPOSE REGISTERS AVAILABLE TO INSTRUCTIONS

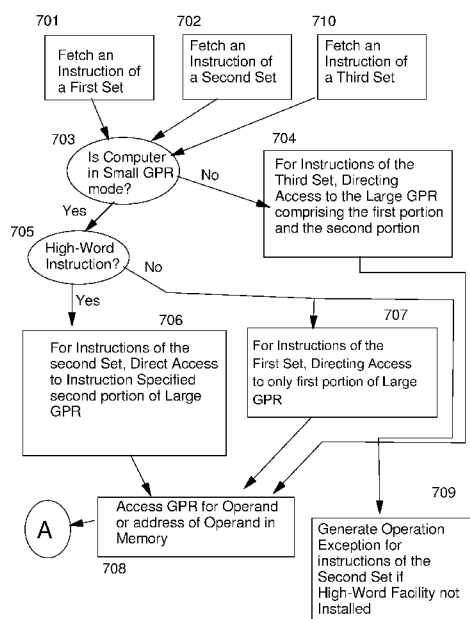


FIG. 7A

(57) Abstract: A computer employs a set of General Purpose Registers (GPRs). Each GPR comprises a plurality of portions. Programs such as an Operating System and Applications operating in a Large GPR mode, access the full GPR, however programs such as Applications operating in Small GPR mode, only have access to a portion at a time. Instruction Op-codes, in Small GPR mode, may determine which portion is accessed.



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