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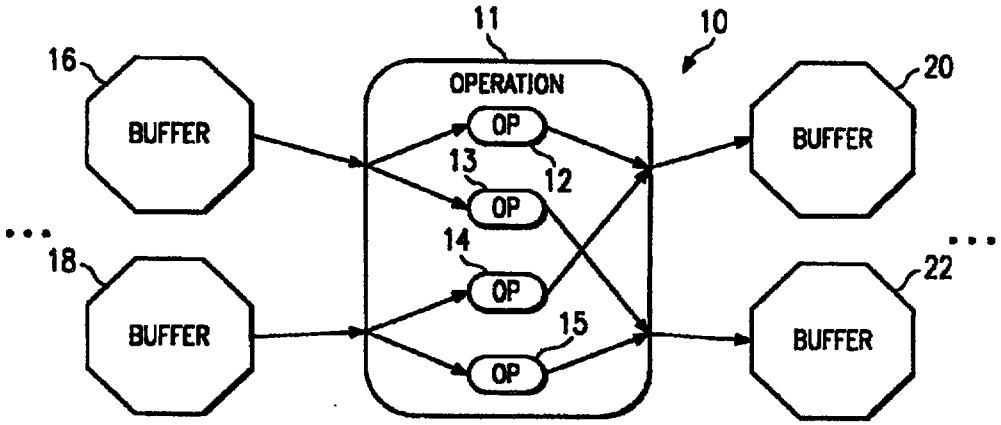
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(54) Title: EXTENSIBLE MODEL NETWORK REPRESENTATION SYSTEM FOR PROCESS PLANNING



(57) Abstract

A computer software system for modeling a process capability on a computer is provided. The computer software system comprises an operation model type for defining a plurality of operation models (33, 36, 44, 52 and 57). Each operation model represents an activity that can be performed by a process. A resource model type is for defining a plurality of resource models (32, 38, 40, 46, 48, 54, 56 and 58). Each resource model represents capacity available for use in performing an activity and rules for allocating capacity to the activity. A buffer model type is for defining a plurality of buffer models (34, 42, 50, and 60). Each buffer model represents rules for controlling a flow of material between activities. The operation model type, buffer model type, and resource model type each comprise a plurality of fields defining attributes that include a plurality of extension selector fields. Defined operation models, buffer models, and resource models are stored as nodes in an interrelated process network model.