Title (en)
SYSTEMS AND METHODS FOR PROCESS DESIGN AND ANALYSIS

Title (de)
SYSTEME UND VERFAHREN FÜR PROZESSDESIGN UND -ANALYSE

Title (fr)
SYSTÈMES ET PROCÉDÉS DE CONCEPTION ET D'ANALYSE DE PROCESSUS

Publication
EP 3676735 A1 20200708 (EN)

Application
EP 18852526 A 20180827

Priority
• US 201715690128 A 20170829
• US 2018048174 W 20180827

Abstract (en)
[origin: WO2019046207A1] Systems and methods for process design and analysis of processes that result in products or analytical information are provided. A hypergraph data store is maintained and comprises versions of each process. A version comprises a hypergraph with nodes, for stages of the process, and edges. Stages have parameterized resource inputs associated with stage input properties, and input specification limits. Stages have resource outputs with output properties and output specification limits. Edges link the outputs of nodes to the inputs of other nodes. A run data store is maintained with a plurality of process runs, each run identifying a process version, values for the inputs of nodes in the corresponding hypergraph, their input properties, resource outputs of the nodes, and obtained values of output properties of the resource outputs. When a query identifies one or more inputs and/or outputs present in the run data store, they are formatted for analysis.

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