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Collaborative batch aggregation and scheduling in a manufacturing

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Application

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Field of Search

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ABSTRACT | CLAIMS | DESCRIPTION | FULL TEXT

Abstract

In one aspect, a computer-implemented method is provided for aggregating and scheduling product batches in a manufacturing environment. Using a batch aggregation engine implementing a mathematical programming strategy, one or more product demands are allocated to one or more product batches having suggested sizes and suggested starting times. The mathematical programming strategy includes evaluating a number of time-based penalties relative to one another in allocating the demands to the batches, the time-based penalties being based on relationships between suggested starting times for batches and times of demands being considered for allocation to batches. The suggested sizes, the suggested starting times, and feedback relating to the suggested sizes and suggested starting times are communicated from the batch aggregation engine to a scheduling engine to assist the scheduling engine in scheduling starting times for the

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batches.

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