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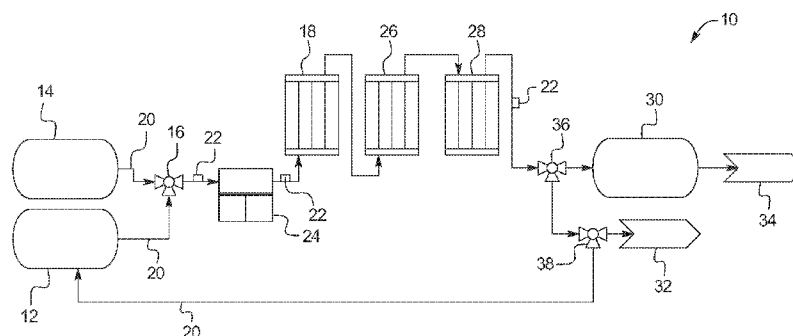
- as to the identity of the inventor (Rule 4.17(i))
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- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))
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(54) **Title:** SYSTEMS AND METHODS FOR DETECTING WATER/PRODUCT INTERFACES DURING FOOD PROCESSING

FIG. 1



(57) **Abstract:** The present disclosure provides systems and methods for manufacturing food products. In a general embodiment, systems for manufacturing a food product include at least one heat exchanger, at least one food product tank, at least one conduit downstream of the food product tank for flow of the food product, and a flow detection device coupled to an exterior of the conduit. The flow detection device includes a processor and a computer readable medium storing instructions which, when executed, cause the processor to perform a spread spectrum analysis of the flow of the food product through the conduit. Methods for manufacturing food products are also provided.