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(54) Title: CONTROL OF IODIDES IN ACETIC ACID PRODUCTION

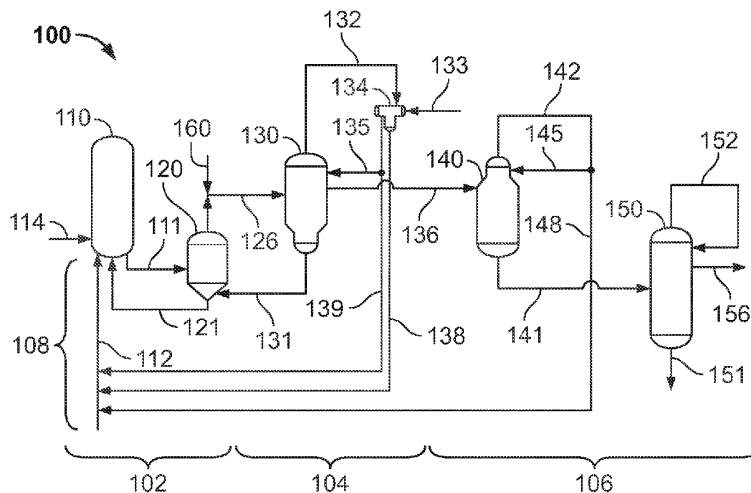


FIG. 1

(57) Abstract: A process for producing and recovering acetic acid in an acetic acid production system is disclosed, the process comprising contacting methanol and carbon monoxide in the presence of a liquid reaction medium comprising iodide under carbonylation conditions sufficient to form acetic acid. The liquid reaction medium comprises a carbonylation catalyst, water, and an additive comprising a bidentate phosphine dioxide, a tertiary arsine oxide, or a combination thereof. An aspect of the process includes a method for reducing water in an acetic acid production process.

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