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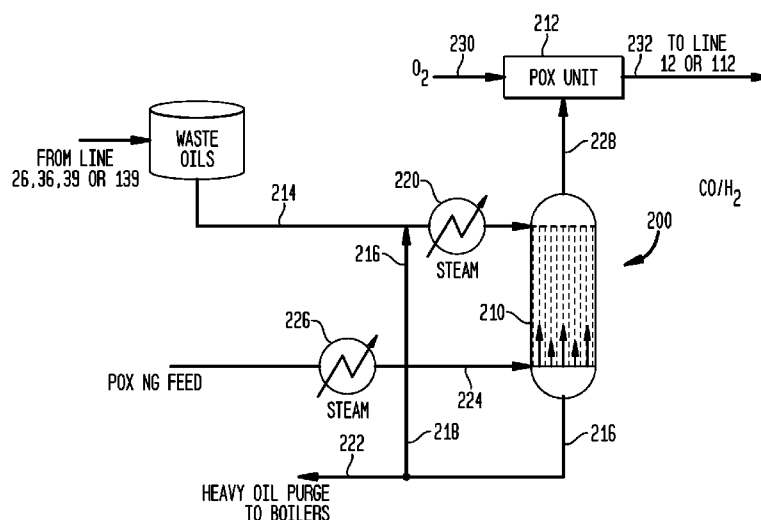
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(54) Title: IMPROVED OXO PROCESS AND METHOD FOR PRODUCING SYNTHESIS GAS FROM WASTE OIL

FIG. 3



(57) Abstract: An improved OXO process with converted waste oil recycle includes: (a) hydroformylating an olefin with synthesis gas in a reactor to produce an OXO product as well as by-product waste oil, the by-product waste oil having a lower or higher boiling temperature than said OXO product; (b) separating OXO product from the by-product waste oil; (c) converting separated waste oil to synthesis gas; and (d) recycling the synthesis gas produced in step (c) to the reactor of step (a).