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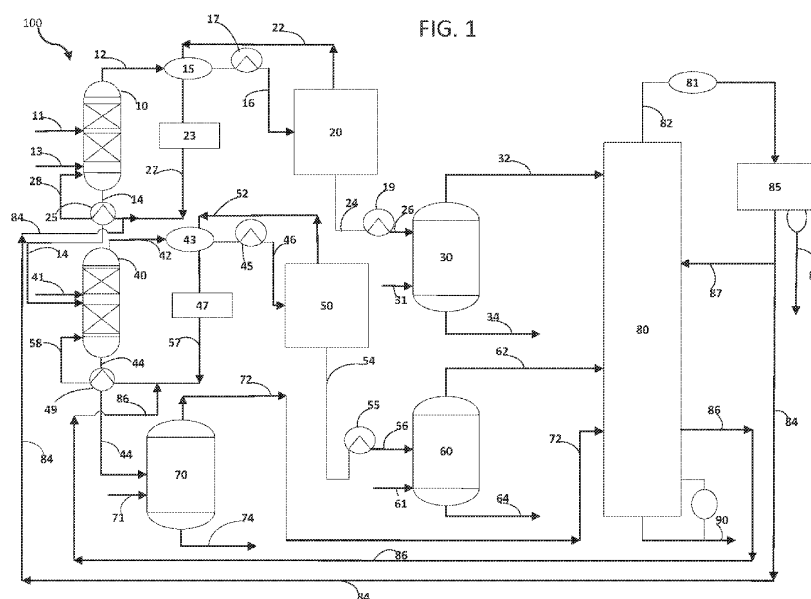
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(54) Title: MULTI-STAGE SOLVENT EXTRACTION PROCESS AND APPARATUS



(57) Abstract: Process and apparatus for two-stage solvent extraction of hydrocarbon products is disclosed. The process comprises passing a heavy hydrocarbon feed stream and a first fresh solvent to a first extraction column to generate a first overhead stream and a first bottom stream. The first overhead stream is passed to a first stripping column to generate a first product stream and a first stripped solvent stream. The first bottom stream is passed to a second extraction column to generate a second overhead stream and a second bottom stream. A second fresh solvent stream is passed to a second extraction column. The second overhead stream is passed to a second stripping column to generate a second product stream and a second stripped solvent stream. Passing the first stripped solvent stream and the second stripped solvent stream to a solvent recovery column and passing the second bottom stream to a pitch stripper.

[Continued on next page]

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