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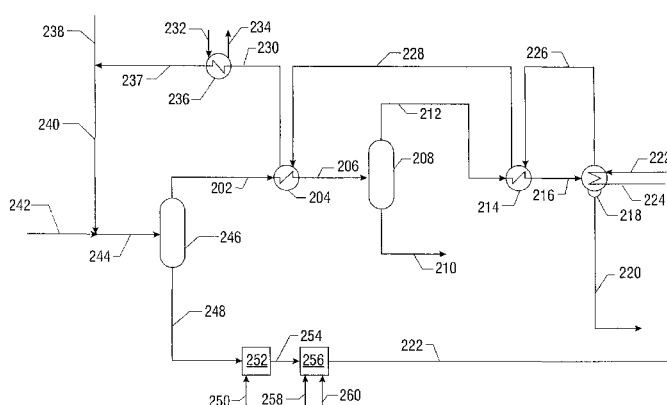
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- (71) Applicant: **TEXACO DEVELOPMENT CORPORATION** [US/US]; 2000 Wetchester AVenue, White Plains, NY 10650 (US).
- (74) Agents: **WHITE, Carter, J.** et al.; Howrey Simon Arnold & While, LLP, 750 Bering Drive, Houston, TX 77057-2198 (US).
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- (72) Inventors: **WALLACE, Paul, S.**; 1110 Cheyenne Meadows, Katy, TX 77450 (US). **JOHNSON, Kay, A.**; 2927 Nancy Bell Lane, Missouri City, TX 77459 (US). **PENROSE, Clint, F.**; 10811 Richmond Ave., #39, HOuston, TX 77042 (US). **NICCUM, Jacquelyn, G.**; 4012 Oberlin, Houston, TX 77005 (US).
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(54) Title: ASPHALT AND RESIN PRODUCTION TO INTEGRATION OF SOLVENT DEASPHALTING AND GASIFICATION



(57) Abstract: This invention involves heat integration of a solvent deasphalting process with a gasification process and an improved process for separating a resin phase from a solvent solution comprising a solvent, deasphalted oil (DAO) and resin. This improved process comprises heating the solvent solution so as to precipitate the resin from the solvent solution, and then separating the resin and some solvent from the solvent solution. This will produce a resin product and a mixture comprising the DAO and the remaining solvent. The DAO/solvent mixture is then boiled so as to vaporize a fraction of the solvent, with waste heat from a gasification unit providing the heat source for the boiling. The vaporized solvent is removed from the DAO/solvent mixture leaving a resin-free DAO product that contains any unvaporized solvent. The vaporized solvent is used for heating the aforementioned solvent solution and preheating the resin-free DAO/solvent mixture. The solvent solution heating and DAO/solvent mixture preheating steps are usually done in series, where the DAO/solvent mixture is first preheated prior to the boiling step leaving a cooled vaporized solvent fraction. The cooled vaporized solvent fraction is then used to provide the heat to the solvent solution prior to the resin separation step. The asphalt that is recovered in the deasphalting step is then used as feedstock in the gasification process.