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(54) Title: PROCESS FOR RECYCLING SOLVENT USED IN AN ETHYLENE-BASED POLYMERIZATION REACTION AND SYSTEM THEREFOR

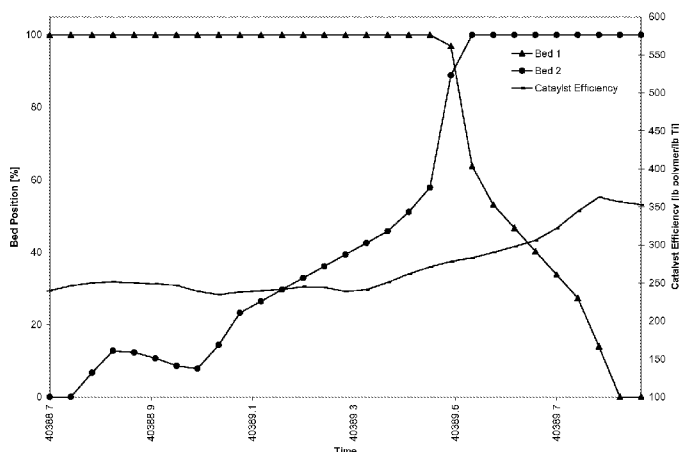


FIG. 1

(57) Abstract: A process for recycling solvent used in an ethylene-based polymerization comprising: passing a solvent stream which has been used in a first ethylene-based solvent polymerization reactor through an online purification bed to produce a recycle solvent stream, wherein the solvent stream prior to being passed through the online purification bed comprises solvent, ethylene, hydrogen, polymerization by-products and optionally comonomer; and passing the recycle solvent stream from the online purification bed to a second ethylene-based solvent polymerization reactor; wherein the second ethylene-based solvent polymerization reactor exhibits a catalyst efficiency dip of less than or equal to 20% for no longer than a forty-eight hour period following a swap of the online purification bed to a regenerated purification bed which contains an adsorbent having low reactivity to alkenes is provided.