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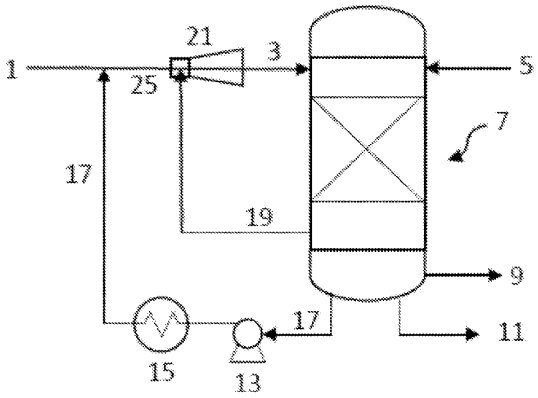
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(54) Title: PROCESS FOR HYDROGENATING A SUBSTRATE

Figure 2



(57) Abstract: The present invention provides a process for hydrogenating a substrate in a hydrogenation reactor to provide a liquid product, said process comprising: (a) supplying to the hydrogenation reactor; (i) fresh substrate; (ii) fresh hydrogen gas; (ii)recycled liquid product; (iii) recycled hydrogen gas; (c) collecting liquid product in a liquid product stream from an outlet of the hydrogenation reactor; (d) collecting liquid product in a liquid product recycle stream and returning at least portion to the hydrogenation reactor as the recycled liquid product; (e) collecting hydrogen gas from an outlet of the hydrogenation reactor as a hydrogen gas recycle stream and returning at least a portion to the hydrogenation reactor as the recycled hydrogen gas; wherein the hydrogen gas recycle stream is passed through an eductor before it is returned to the hydrogenation reactor; and wherein the motive fluid in the eductor is the fresh substrate, the liquid product recycle stream or a combination of the fresh substrate and the liquid product recycle stream, or the motive fluid is the fresh hydrogen gas.

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