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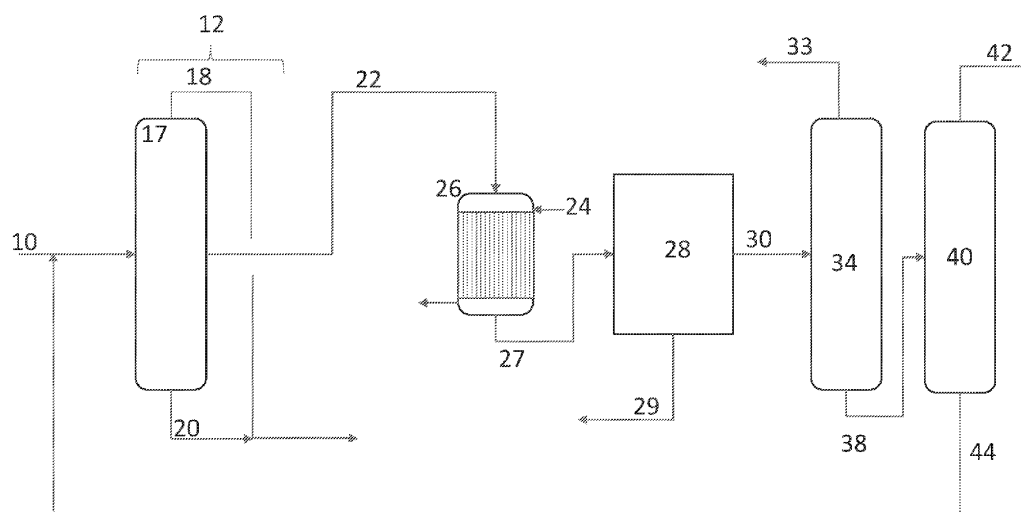


Figure 2

(57) Abstract: Systems and methods for the production of a high purity isoamylene product. The isoamylene in a mixed hydrocarbon stream may initially be converted to TAME via etherification, and a subsequent decomposition of the TAME may result in a high purity isoamylene stream with very low impurities that is suitable for a variety of petrochemical applications, such as for use in the production of fragrances, pesticides, peroxides, polymer antioxidants, UV stabilizers and hydrocarbon resins.

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