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(54) Title: PROCESS FOR SEPARATING METHYLCYCLOPENTANONE FROM CYCLOHEXANONE

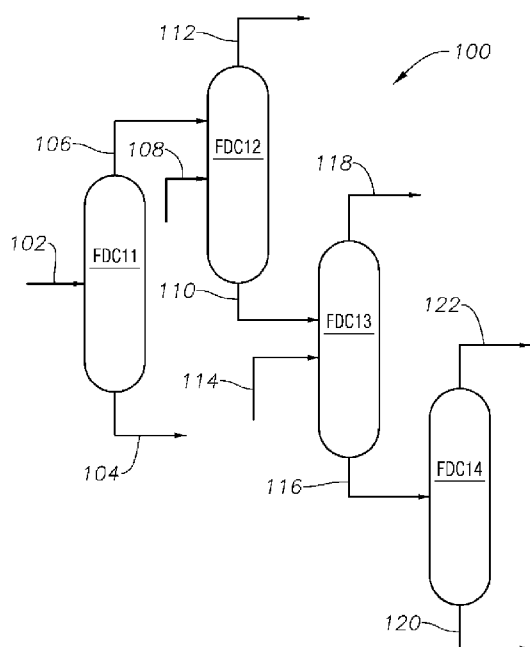


FIG. 1

(57) Abstract: In a process for separating methylcyclopentanone from a mixture comprising methylcyclopentanone and cyclohexanone, a feedstock comprising cyclohexanone, methylcyclopentanone, water at a concentration of at least 0.10 wt%, and optionally phenol is fed into a fractionation distillation column, where a lower effluent rich in cyclohexanone and an upper effluent rich in methylcyclopentanone are produced. Due to the inclusion of water at a relatively high concentration in the feedstock, efficient separation of methylcyclopentanone is achieved. In certain particularly desirable embodiments, the lower effluent is substantially free of methylcyclopentanone. The thus produced cyclohexanone may be used to make, e.g., high-purity caprolactam, which, in turn, may be used for fabricating, e.g., high-performance nylon-6 material.



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