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(54) Title: PROCESS FOR MAKING CAPROLACTAM

(57) Abstract: Lactams, in particular ϵ -caprolactam, are produced by the hydrolytic cyclization of aminonitriles, in particular 6-aminocapronitrile, in the vapor phase in a plurality of adiabatic fixed bed reaction zones arranged in succession wherein at least a portion of the heat of the exothermic reaction is removed between each of the successive reaction zones. Conducting the reaction in such a manner requires less capital for the reactor itself. It has also been found that the product exiting such a reaction system can be directly fed to a distillation unit without the need of additional cooling or storing.

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