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(54) Title: PROCESS FOR THE PRODUCTION OF POLYAMIDES FROM DINITRILES AND DIAMINES

(57) Abstract: A process for producing polyamides from dinitriles and diamines in a continuous reaction using subsequent heating steps. In particular, the process involves contacting a dinitrile, a diamine, water, and optionally a catalyst to form a reaction mixture; heating the reaction mixture to a first elevated temperature of between about 180 to about 240 °C, maintaining said temperature for about 0.10 to about 20 hours, and optionally controlling the pressure in this heating step by venting; heating the reaction mixture to a second elevated temperature of between about 250 to about 350 °C, adding water to the reaction mixture before or after the second elevated temperature is reached, maintaining the pressure in the second heating step above atmospheric pressure by venting at least some of the water, and maintaining the second elevated temperature for a period of about 0.10 to about 10 hours; and recovering the polyamide.

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