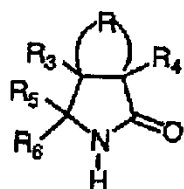


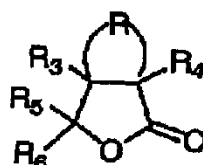
PRODUCTION METHOD OF POLYCYCLIC LACTAMS

ABSTRACT

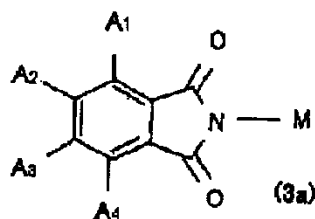
A process for producing lactams of the formula (1), comprising the step of reacting lactones of the formula (2) with imides of any of the formulae (3a), (3b) and (3c) to thereby obtain corresponding carboxylic acids (step A); the step of esterifying the carboxylic acids into corresponding esters (step B); and the step of reacting the esters with amines to thereby obtain lactams of the formula (1) (step C). (1)-(2) (3a)-(3c) In the formulae, when R_3 and R_4 are simultaneously hydrogen atoms, R is a substituted methylene or optionally substituted polymethylene; when at least one of R_3 and R_4 is a substituent other than hydrogen atom, R is an optionally substituted methylene or polymethylene; each of R_3 , R_4 , R_5 and R_6 independently is a hydrogen atom, a halogen atom, cyano, etc.; each of A_1 , A_2 , A_3 , A_4 , A_5 , A_6 , A_7 , A_8 , A_9 and A_{10} independently is a hydrogen atom, a halogen atom, nitro, etc.; and M is a hydrogen atom or an alkali metal atom.



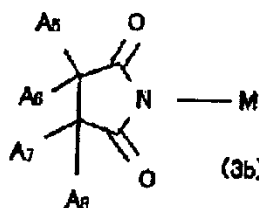
(1)



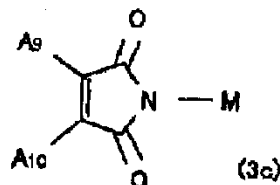
(2)



(3a)



(3b)



(3c)