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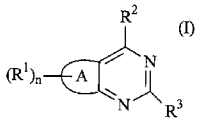
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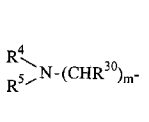
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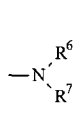
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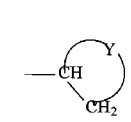
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(54) Title: PHARMACEUTICAL COMPOUNDS









(57) Abstract: Fused pyrimidines of formula (I); wherein A represents a thiophene or furan ring; n is 1 or 2; R^1 is a group of formula (1); wherein m is 0 or 1; R^{30} is H or C_1-C_6 alkyl; R^4 and R^5 form, together with the N atom to which they are attached, a 5- or 6- membered saturated N-containing heterocyclic group which includes 0 or 1 additional heteroatoms selected from N, S and O, which may be fused to a benzene ring and which is unsubstituted or substituted; or one of R^4 and R^5 is alkyl and the other is a 5- or 6- membered saturated N-containing heterocyclic group as defined above or an alkyl group which is substituted by a 5- or 6- membered saturated N- containing heterocyclic group as defined above; R2 is selected from formula (a); wherein R^6 and R^7 form, together with the nitrogen atom to which they are attached, a morpholine, thiomorpholine, piperidine, piperazine, oxazepane or thiazepane group which is unsubstituted or substituted; and formula (b); wherein Y is a C_2-C_4 alkylene chain which contains, between constituent carbon atoms of the chain and/or at one or both ends of the chain, 1 or 2 heteroatoms selected from O, N and S, and which is unsubstituted or substituted ; and R^3 in an indole group which is unsubstituted or substituted ; and the pharmaceutically acceptable salt thereof have activity as inhibitors of PI3K and may thus be used to treat diseased and disorders arising from abnormal cell growth, function or behaviour associated with PI3 kinase such as cancer, immune disorders, cardiovascular disease, viral infection, inflammation, metabolism/endocrine disorders and neurological disorders. Processes for synthesizing the compounds are also described.

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