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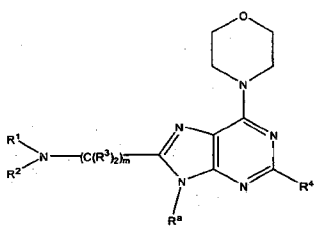
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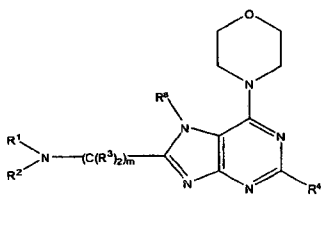
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(54) Title: PURINE DERIVATIVES USEFUL AS PI3 KINASE INHIBITORS



(Ia)



(Ib)

(57) Abstract: This invention provides a compound which is a purine of formula (Ia) or (Ib): and the pharmaceutically acceptable salts thereof that are inhibitors of PI3K and a selective for the p110δ isoform, which is a class Ia PI3 kinase, over other class Ia PI3 kinases and over class Ib kinases. The compounds may be used to treat diseases and disorders arisi from abnormal cell growth, function or behaviour associated with PI3 kinase such as cance immune disorders, cardiovascular disease, viral infection, inflammation, metabolism/endocrine function disorders and neurological disorders.

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