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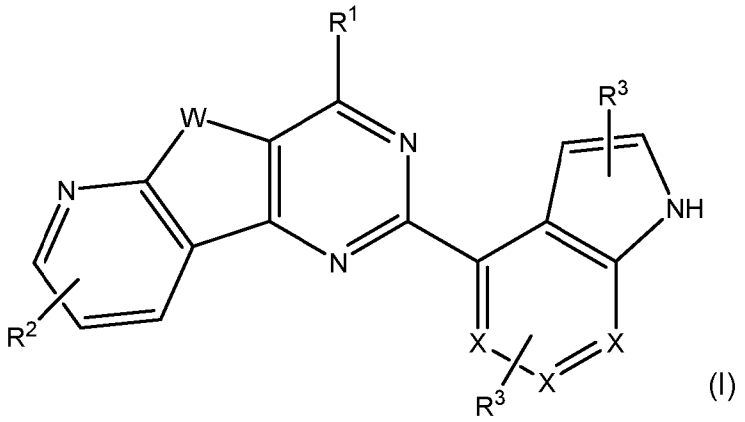
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(54) **Title**: TRICYCLIC HETEROCYCLIC COMPOUNDS AS PHOSPHOINOSITIDE 3-KINASE INHIBITORS



(I)

(57) **Abstract**: A compound of formula I: (I) or a pharmaceutically acceptable salt thereof, wherein: W is O, N-H, N-(C_1 -C 10 alkyl) or S; each X is independently CH or N; R^1 is a 5 to 7-membered saturated or unsaturated, optionally substituted heterocycle containing at least 1 heteroatom selected from N or O; R^2 is LY; each L is a direct bond, C_1 -C_{10} alkylene, C_2 -C_{10} alkenylene or C_2 -C_{10} alkynylene; Y is an optionally substituted fused, bridged or spirocyclic non-aromatic 5-12 membered heterocycle containing up to 4 heteroatoms selected from N or O; and each R^3 is independently H, C_1-C_{10} alkyl, halogen, fluoro C_1 -C_{10} alkyl, O- C_1 -C_{10} alkyl, NH-C_1 -C_{10} alkyl, S-C_1 -C_{10} alkyl, O- fluoro C_1 -C_{10} alkyl, NH-acyl, NH-C(O)-NH-C_1 -C_{10} alkyl, C(O)-NH-C_1 -C_{10} alkyl, aryl or heteroaryl, are useful as inhibitors of the class IA phosphoinositide 3- kinase enzyme, PI3K-p110δ, and therefore have potential utility in the therapy of cancer, immune and inflammatory diseases.

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