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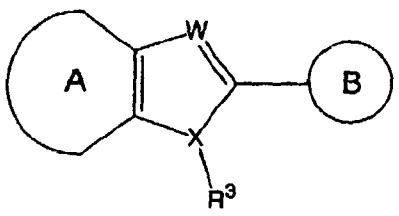
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(54) Title: HETEROARYL COMPOUNDS USEFUL AS INHIBITORS OF GSK-3



(I)

(57) Abstract: The present invention relates to compounds of formula I wherein: Ring A is an optionally substituted 5-7 membered, partially unsaturated or fully unsaturated ring having 0-3 heteroatoms independently selected from nitrogen, oxygen or sulfur, and wherein Ring A is optionally fused to an optionally substituted saturated, partially unsaturated or fully unsaturated 5-8 member ring having 0-3 heteroatoms independently selected from nitrogen, oxygen or sulfur; Ring B is an optionally substituted 5-6 membered ring having 0 to 4 heteroatoms, independently selected from nitrogen, oxygen, or sulfur, wherein said ring has a first substituent, $-N(R^1)_2$, in the position adjacent to the point of attachment, and is optionally substituted by up to two additional substituents. Compoounds of formula I are useful as inhibitors of GSK-3 and Lck protein kinases. The present invention also provides pharmaceutically acceptable compositions comprising the compounds of the invention and methods of utilizing those compositions in the treatment and prevention of various disorders, such as diabetes, Alzheimer's disease, and transplant rejection.

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