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(54) Title **METHODS OF PREPARING NEW IDH1 INHIBITORS**

(56) References

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WO-A1-2009/150248

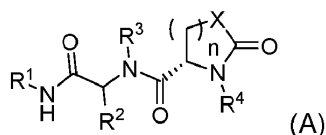
WO-A1-2011/072174

JANETA POPOVICI-MULLER ET AL: "Discovery of the First Potent Inhibitors of Mutant IDH1 That Lower Tumor 2-HG in Vivo", ACS MEDICINAL CHEMISTRY LETTERS, vol. 3, no. 10, 11 October 2012 (2012-10-11), pages 850-855, XP055159509, ISSN: 1948-5875, DOI: 10.1021/ml300225h

Enclosed is a translation of the patent claims in Norwegian. Please note that as per the Norwegian Patents Acts, section 66i the patent will receive protection in Norway only as far as there is agreement between the translation and the language of the application/patent granted at the EPO. In matters concerning the validity of the patent, language of the application/patent granted at the EPO will be used as the basis for the decision. The patent documents published by the EPO are available through Espacenet (<http://worldwide.espacenet.com>) or via the search engine on our website here: <https://search.patentstyret.no/>

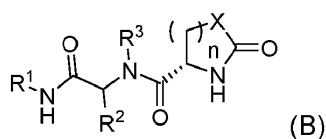
Patentkrav

1. Fremgangsmåte for å lage en forbindelse med strukturformel (A), hvori:



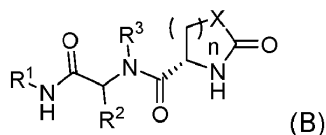
R¹ er valgfritt substituert C₄-C₆ karbocyklyl;
 hver R² og R³ er uavhengig valgt fra valgfritt substituert aryl eller valgfritt substituert heteroaryl;
 R⁴ er valgfritt substituert aryl eller valgfritt substituert heteroaryl,
 n er 1 eller 2; og
 X er -CH₂-, O, -NH- eller -CH(OH)-;

fremgangsmåten omfatter:
 omsetning av en forbindelse med formel B:

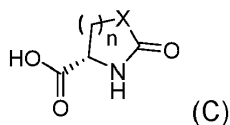


med R⁴-Br under Buchwald-betingelser omfattende bruk av en palladiumkatalysator, en ligand og en base i et organisk løsningsmiddel for å tilveiebringe forbindelsen med strukturformel (A), hvori det organiske løsningsmidlet er dioksan, palladiumkatalysatoren er Pd₂(dba)₃, liganden er Xant-Phos og basen er cesiumkarbonat.

2. Fremgangsmåte for å lage en forbindelse med strukturformel (B),



fremgangsmåten omfatter:
 omsetning av en forbindelse med strukturformelen (C):



med R¹NC, R²CHO og R³-NH₂ under Ugi-koblingsreaksjonsbetingelser for å gi forbindelsen med strukturformel (B) hvor:

R¹ er valgfritt substituert C₄-C₆ karbocyklyl;
 hver R² og R³ er uavhengig valgt fra valgfritt substituert aryl eller valgfritt substituert heteroaryl;
 n er 1 eller 2; og
 X er -CH₂-, O, -NH- eller -CH(OH)-.

3. Fremgangsmåte ifølge krav 2, hvori Ugi-koblingen finner sted i metanol.