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(81) **Designated States** *(unless otherwise indicated, for every kind of national protection available):* AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

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[Continued on next page]

(54) Title: USE HEDGEHOG KINASE ANTAGONISTS TO INHIBIT HEDGEHOG SIGNALING AND TO TREAT CANCER

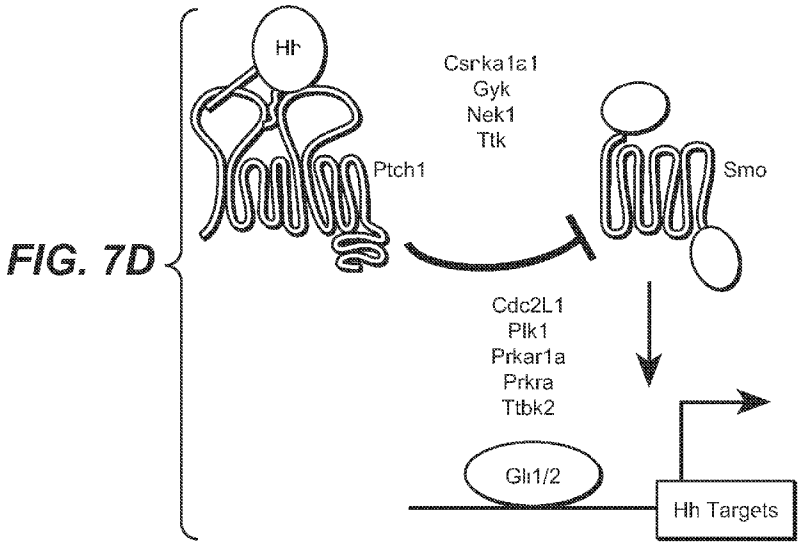


FIG. 7D

(57) Abstract: The present invention provides for a method of using CDC2L1, CSNKlAl, GYK, NEKl, PLKl, PRKARlA, PRKRA, TTBK2 or TTK hedgehog kinase antagonists to inhibit hedgehog signaling, as well as treating and diagnosing disorders relating to hedgehog signaling or overexpression of hedgehog, including cancer, cell proliferative disorders, and angiogenesis, neurological disorders, as well as other conditions affected by hedgehog signaling such as hair growth, neural stem cell differentiation, chondrogenesis and osteogenesis, lung surfactant production, formation of lamellated bodies in lung cells.

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FR, GB, GR, HU, IE, **IS, IT,** LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, **BJ,** CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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A. CLASSIFICATION OF SUBJECT MATTER
INV. A61K31/7088 A61K47/48 G01N33/50 C12N5/00 A61P35/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
A61K G01N C12N A61P

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal , WPI Data, BIOSIS, EMBASE, Sequence Search

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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Y	see claim 1	1-41
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[X] Further documents are listed in the continuation of Box C.

[X] See patent family annex.

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Date of the actual completion of the international search	Date of mailing of the international search report
7 July 2008	21/07/2008

Name and mailing address of the ISA/	Authorized officer
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