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(54)	Title	5-((HALOPHENYL)-3-HALO-PYRIDIN-2-YL)-NITRILE DERIVATIVES AS INTERMEDIATES IN THE PREPARATION OF [(5-(HALOPHENYL)-3-HYDROXYPYRIDINE-2-CARBONYL)-AMINO]ALKANOIC ACID DERIVATIVES
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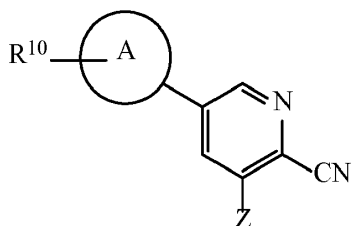
(56) References

Cited: WO-A2-2004/019868
WO-A2-2008/002576
WO-A1-2012/170442

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. Forbindelse med formelen:



5 eller et farmasøytisk akseptabelt salt derav,

hvor A er en ring valgt fra:

2-fluorfenyl, 3-fluorfenyl, 4-fluorfenyl, 2,3-difluorfenyl, 3,4-difluoro-fenyl, 3,5-difluorfenyl, 2-klorfenyl, 3-klorfenyl, 4-klorfenyl, 2,3-diklorfenyl, 3,4-diklorfenyl, 2-bromfenyl, 3-bromfenyl, 4-bromfenyl, 3,5-diklorfenyl, 2,3,4-trifluorfenyl, 2,3,5-trifluorfenyl, 2,3,6-trifluorfenyl, 2,4,5-trifluorfenyl, 2,4,6-trifluorfenyl, 2,4-diklorfenyl, 2,5-diklorfenyl, 2,6-diklorfenyl, 3,4-diklorfenyl, 2,3,4-triklorfenyl, 2,3,5-triklorfenyl, 2,3,6-triklorfenyl, 2,4,5-triklorfenyl, 3,4,5-triklorfenyl, 2,4,6-triklorfenyl, 2-klor-3-metylfenyl, 2-klor-4-metylfenyl, 2-klor-5-metylfenyl, 2-klor-6-metylfenyl, 3-klor-2-metylfenyl, 3-klor-4-metylfenyl, 3-klor-5-metylfenyl, 3-klor-6-metylfenyl, 2-fluor-3-metylfenyl, 2-fluoro-4-metylfenyl, 2-fluoro-5-metylfenyl, 2-fluoro-6-metylfenyl, 3-fluoro-2-metylfenyl, 3-fluoro-4-metylfenyl, 3-fluor-5-metylfenyl og 3-fluor-6-metylfenyl;

Z er uavhengig klor eller brom; og

R₁₀ er fraværende.

20 2. Forbindelse ifølge krav 1, hvor Z er klor.

3. Forbindelse ifølge krav 1, hvor Z er brom.

25 4. Forbindelse ifølge hvilket som helst av kravene 1-3, hvor ring A er valgt fra 2-fluorfenyl, 3-fluorfenyl, 4-fluorfenyl, 2,3-difluorfenyl, 3,4-difluoro-fenyl, 3,5-difluorfenyl, 2-klorfenyl, 3-klorfenyl, 4-klorfenyl, 2,3-diklorfenyl, 3,4-diklorfenyl, 2-bromfenyl, 3-bromfenyl, 4-bromfenyl, 3,5-diklorfenyl, 2,3,4-trifluorfenyl, 2,3,5-trifluorfenyl, 2,3,6-trifluorfenyl, 2,4,5-trifluorfenyl, 2,4,6-trifluorfenyl, 2,4-diklorfenyl, 2,5-diklorfenyl, 2,6-diklorfenyl, 3,4-diklorfenyl, 2,3,4-triklorfenyl, 2,3,5-triklorfenyl, 2,3,6-triklorfenyl, 2,4,5-triklorfenyl, 3,4,5-triklorfenyl, og 2,4,6-triklorfenyl.

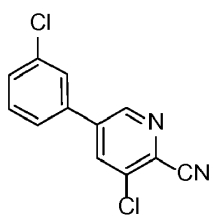
5. Forbindelse ifølge hvilket som helst av kravene 1-3, hvor ring A er valgt fra 2-klor-3-metylfenyl, 2-klor-4-metylfenyl, 2-klor-5-metylfenyl, 2-klor-6-metylfenyl, 3-klor-2-metylfenyl, 3-klor-4-metylfenyl, 3-klor-5-metylfenyl, 3-klor-6-metylfenyl, 2-fluor-3-

metylfenyl, 2-fluoro-4-metylfenyl, 2-fluor-5-metylfenyl, 2-fluoro-6-metylfenyl, 3-fluoro-2-metylfenyl, 3-fluoro-4-metylfenyl, 3-fluoro-5-metylfenyl og 3-fluoro-6-metylfenyl.

5 6. Forbindelse ifølge hvilket som helst av kravene 1-3, hvor ring A er 3-klorfenyl eller 3-klor-6-metylfenyl.

7. Forbindelse ifølge hvilket som helst av kravene 1-3, hvor ring A er 3-klorfenyl.

10 8. Forbindelse ifølge krav 1 med strukturen,



15 9. Forbindelse ifølge krav 1, hvor forbindelsen er et farmasøytisk akseptabelt salt av forbindelsen med strukturen,

