

Title (en)  
BREAST CANCER CELL GROWTH-INHIBITING ENZYME INHIBITORS, METHOD FOR THE PRODUCTION THEREOF, AND USE THEREOF

Title (de)  
BRUSTKREBSZELLWACHSTUM-HEMMENDE ENZYMINHIBITOREN, VERFAHREN ZU IHRER HERSTELLUNG SOWIE DEREN VERWENDUNG

Title (fr)  
INHIBITEURS ENZYMATIQUES DE LA CROISSANCE DES CELLULES DE CANCER DU SEIN, PROCÉDÉ POUR LES PRÉPARER ET LEUR UTILISATION

Publication  
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Application  
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Priority  
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Abstract (en)  
[origin: WO2014207573A2] Breast cancer is, according to epidemiological data, the most common cancer in women. Particularly aggressive breast cancers are characterized in that they are invasive and metastatic. The treatment of said type of aggressive breast cancer is extremely difficult and very expensive due to the use of specific antibodies which can only be used after multiple positive histochemical testing has been carried out. The aim of the invention is to develop novel enzyme inhibitors in combination for inhibiting the enzymes which fight the aggressive breast cell growth both synergistically as well as additively. The claimed developed pyridoannelated indoles act in a selectively inhibiting manner on the enzyme HER2 and/or Brk in the nanomolar - picomolar concentration range in screening of more than 200 kinases of the human kinomes. The claimed developed enzyme inhibitors inhibit the growth of breast cancer cells in the nanomolar concentration range without displaying critical toxic effects. The 4-chloro-a-carboline can be derivatised in position 6 without forming auxiliary products and the derivatisation in position 4 with the aniline derivative with high purity with quantitative yields can also be carried. The invention also relates to the use in the medical field/oncology for the treatment of aggressive breast cancer.

IPC 8 full level  
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