

Title (en)

METFORMIN CONJUGATES AND THERAPEUTIC USE THEREOF

Title (de)

METFORMINKONJUGATE UND IHRE THERAPEUTISCHE VERWENDUNG

Title (fr)

CONJUGUÉS DE METFORMINE ET LEUR UTILISATION THÉRAPEUTIQUE

Publication

**EP 4384499 A1 20240619 (EN)**

Application

**EP 22765210 A 20220808**

Priority

- IT 202100021548 A 20210809
- IB 2022057370 W 20220808

Abstract (en)

[origin: WO2023017400A1] Novel compounds of general Formula (I) derived from the conjugation of the native metformin drug to molecular moieties endowed with the property of releasing hydrogen sulfide are described. The compounds forming the object of the present invention are capable of exerting hypoglycaemic and anticancer pharmacological effects, as well as counteracting cardiovascular disruptions associated with diabetes and other metabolic or cancer diseases more effectively. A pharmaceutical composition comprising the compounds according to the invention in a pharmaceutically acceptable carrier, as well as in combination with optional adjuvants, stabilizers and/or preservatives, is also described.

IPC 8 full level

**C07C 323/60** (2006.01); **A61K 31/17** (2006.01); **A61K 31/381** (2006.01); **A61P 3/10** (2006.01); **A61P 9/00** (2006.01); **A61P 35/00** (2006.01);  
**C07C 327/54** (2006.01); **C07C 329/02** (2006.01); **C07C 331/32** (2006.01); **C07C 335/28** (2006.01); **C07D 277/34** (2006.01);  
**C07D 339/04** (2006.01); **C07D 339/06** (2006.01)

CPC (source: EP)

**A61P 3/10** (2017.12); **A61P 9/00** (2017.12); **A61P 35/00** (2017.12); **C07C 323/60** (2013.01); **C07C 327/54** (2013.01); **C07C 329/02** (2013.01);  
**C07C 331/32** (2013.01); **C07C 335/28** (2013.01); **C07D 277/34** (2013.01); **C07D 339/04** (2013.01); **C07D 339/06** (2013.01)

Citation (search report)

See references of WO 2023017400A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

**WO 2023017400 A1 20230216**; EP 4384499 A1 20240619; IT 202100021548 A1 20230209

DOCDB simple family (application)

**IB 2022057370 W 20220808**; EP 22765210 A 20220808; IT 202100021548 A 20210809