

Title (en)

METHODS FOR IMPROVING SLEEP QUALITY

Title (de)

VERFAHREN ZUR VERBESSERUNG DER SCHLAFQUALITÄT

Title (fr)

MÉTHODES POUR AMÉLIORER LA QUALITÉ DU SOMMEIL

Publication

**EP 4255456 A1 20231011 (EN)**

Application

**EP 21899339 A 20211201**

Priority

- AU 2021900454 A 20210222
- AU 2020904451 A 20201201
- AU 2021051432 W 20211201

Abstract (en)

[origin: WO2022115907A1] Provided herein are methods for inducing or maintaining sleep, for improving sleep quality, or for treating insomnia, in human subjects, comprising administering an effective amount of *Lactobacillus plantarum* and/or *Lactobacillus zeae*, or a culture supernatant or cell free filtrate derived from culture media in which said *Lactobacillus* species has been cultured. In an embodiment, the method comprises administering a microbial biotherapeutic composition comprising *Lactobacillus plantarum* and *Lactobacillus zeae*.

IPC 8 full level

**A61K 35/747** (2015.01); **A23L 29/00** (2016.01); **A23L 33/135** (2016.01); **A61K 35/00** (2006.01); **A61P 25/20** (2006.01)

CPC (source: AU EP)

**A23L 29/065** (2016.08 - AU); **A23L 33/135** (2016.08 - AU EP); **A61K 35/747** (2013.01 - AU EP); **A61P 25/20** (2018.01 - AU EP); **A23V 2002/00** (2013.01 - AU); **A23V 2400/11** (2023.08 - AU); **A23V 2400/165** (2023.08 - AU); **A23V 2400/169** (2023.08 - AU); **A23V 2400/187** (2023.08 - AU); **A61K 2035/115** (2013.01 - AU); **A61K 2300/00** (2013.01 - AU)

C-Set (source: AU)

1. **A23V 2002/00** + **A23V 2250/154** + **A23V 2250/1614** + **A23V 2250/6422** + **A23V 2250/206** + **A23V 2200/30**
2. **A61K 35/747** + **A61K 2300/00**

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 2022115907 A1 20220609**; EP 4255456 A1 20231011; EP 4255456 A4 20240925

DOCDB simple family (application)

**AU 2021051432 W 20211201**; EP 21899339 A 20211201