

OBTAINING BACTERIA FOR THE REMEDIATION OF OIL POLLUTION FROM SEAWATER



Description of the Invention

The invention is related to the isolation of bacteria used to break down petroleum hydrocarbons, which cause environmental pollution, from seawater.



Applicant İstanbul University



Inventors

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Country

Türkiye

Application Number

2016/14791

Status

Examination/Licensed

Advantages

- High production capacity: Obtaining bacteria through isolation from seawater offers a substantial source for production.
- Cost-effectiveness: The method is economically advantageous due to its low cost.
- Key technology globally: The invention plays a crucial role as a key technology in the global pursuit of eliminating oil pollution, ensuring ecological balance and addressing environmental problems.
- High-value final product: Isolating bacteria using biotechnological methods enables the production of a final product with significant added value.

Market Information

The bioremediation market size was recorded as USD 13.56 billion in 2021. It is projected that by the year 2030, this market will reach USD 28.92 billion, demonstrating a Compound Annual Growth Rate (CAGR) of 9.93%. The substantial growth in the bioremediation market can be attributed to the increasing demand for oil field improvement and the rapid expansion of the crude oil industry. Furthermore, the development of environmentally friendly options for oilfield remediation has contributed to its remarkable growth. With the rise in economic growth and growing environmental awareness, Asian countries are gaining significance in the bioremediation market and are expected to be among the countries exhibiting the highest growth rate.

Target Audience

The target market for this invention includes companies engaged in the reclamation, recycling, and removal of petroleum and its derivatives. Specifically, companies operating within the designated NACE Codes can be identified as the primary target group.

Areas of Use

The invention is actively utilized in the fields of environmental improvement, waste management, and recycling, with a specific focus on oil reclamation studies. It plays a crucial role in the remediation of soil, underground, and surface areas, especially in countries characterized by high levels of oil production. Furthermore, the underlying technology holds considerable potential for the purification of water sources.



Nace Code

38.22.01

Activity

Reclamation and disposal of hazardous waste (hazardous waste reclamation operation of the plants, used for the destruction of hazardous waste disposal and so on. Activities) (excluding radioactive waste)

Expectation

The invention, applicant by İstanbul University, has been licensed to Biyotek15 company on December 30, 2022. Biyotek15 also possesses the right to sub-license the technology. With a focus on the target market defined for this invention, the aim is to establish collaborations with stakeholders capable of product manufacturing. Apart from sub-licensing, collaboration through business associations and industry-to-industry projects is also encouraged. Potential collaborations are sought with national and international funding sources, as well as industrial stakeholders who can contribute equity, to expedite the productization process with adequate support.

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