

# Value-added products from German brown coal

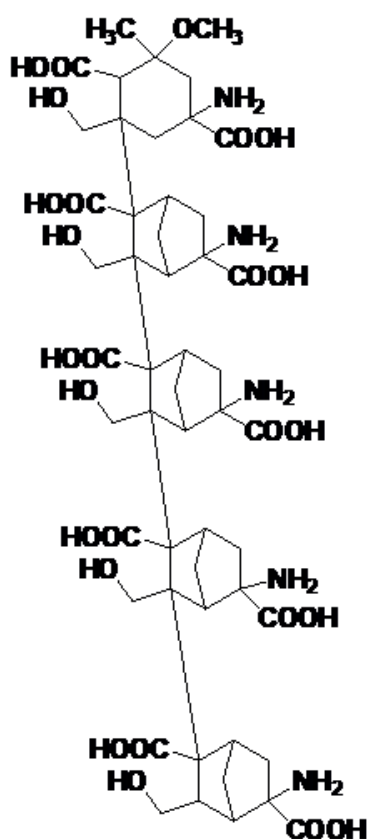
## Name

Acids and their esters based on substituted bicyclo [2. 2. 1] heptanes derived from German brown coal

## Status

Available for development and commercialization

## Chemical Structure



## Sectors of Application

- Agriculture
- Biomedicine
- Materials Science

## **Summary**

Brown coal is used in Germany for running thermal power plants. There is growing opposition against these power plants due to the environmental pollution caused by them, contributing to global warming and consequent climate change. The German government has decided to close down such thermal power plants by the year 2030, when the last employee retires. There is thus an urgent need to find alternate uses for this abundant natural resource without adding to any environmental problems. There seems to be great potential in exploiting German brown coal for obtaining several value-added products having application in agriculture, biomedicine, and materials science.