



162162



333333

5 **PROCESS FOR HYDROTREATING A HEAVY HYDROCARBON FRACTION WITH
PERMUTABLE REACTORS AND REACTORS THAT CAN BE SHORT-CIRCUITED**

Pascal Tromeur and Stéphane Kressmann

A B S T R A C T

10 The invention consists in a process for hydrotreating a heavy hydrocarbon fraction in a first hydrodemetallisation section, then in a second hydrodesulphurisation section into which the effluent from the first section is passed. The hydrodemetallisation section is preceded by at least one guard zone. Said hydrotreatment process comprises the following steps:

- a) a step in which the guard zone is used;
- 15 b) a step during which the guard zone is short-circuited and the catalyst it contains is regenerated and/or replaced;
- c) a step during which the guard zone in which the catalyst has been regenerated and/or replaced is reconnected;
- d) a step in which at least one of the reactors from the hydrodemetallisation section and/or the
- 20 hydrodesulphurisation section can be short-circuited and the catalyst it contains regenerated and/or replaced.

Figure 1 to be published.