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(54) Title: HYDROTREATING CATALYST CONTAINING PHOSPHORUS AND BORON

(57) Abstract: A catalyst having at least one Group VIB metal component, at least one Group VIII metal component, a phosphorus component, and a boron-containing carrier component. The amount of the phosphorus component is at least 1 wt%, expressed as an oxide (P₂O₅) and based on the total weight of the catalyst, and the amount of boron content is in the range of about 1 to about 13 wt%, expressed as an oxide (B₂O₃) and based on the total weight of the catalyst. In one embodiment of the invention, the boron-containing carrier component is a product of a co-extrusion of at least a carrier and a boron source. A method for producing the catalyst and its use for hydrotreating a hydrocarbon feed are also described.

