

**DEEP DESULFURIZATION OF FCC GASOLINE AT LOW
TEMPERATURES TO MAXIMIZE OCTANE-BARREL VALUE**

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ABSTRACT

Low sulfur gasoline of relatively high octane-barrel value is produced from cracked, sulfur containing olefinic naphthas by hydrodesulfurization at low temperature and low space velocity over either a conventional catalyst, such as CoMo/Al₂O₃, or a dual functional catalyst, such as CoMo ZSM-5/Al₂O₃. This approach also minimizes the olefins/hydrogen sulfide re-combination frequently observed at high temperature. The process produces a gasoline having a reduced sulfur content with a less than 5% change in motor octane number and a less than 10% change in research octane number.