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Gudde et al.

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(54) **METHODS AND UNITS FOR MITIGATION OF CARBON OXIDES DURING HYDROTREATING**

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C10G 49/22 (2006.01)

(52) **U.S. Cl.**
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(58) **Field of Classification Search**
USPC 422/141, 143, 600, 601, 650; 208/78, 208/80, 208 R–217; 585/302–304, 469, 585/638–640, 733
See application file for complete search history.

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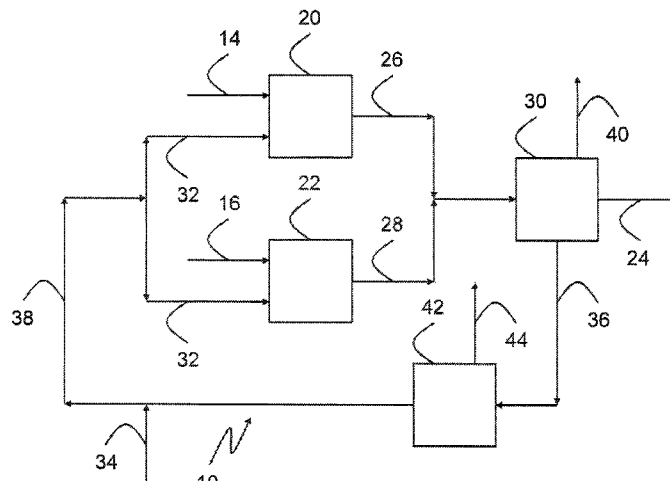
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(57) **ABSTRACT**

This invention relates to methods and units for mitigation of carbon oxides during hydrotreating hydrocarbons including mineral oil based streams and biological oil based streams. A hydrotreating unit includes a first hydrotreating reactor for receiving a mineral oil based hydrocarbon stream and forming a first hydrotreated product stream, and a second hydrotreating reactor for receiving a biological oil based hydrocarbon stream and forming a second hydrotreated product stream.

6 Claims, 12 Drawing Sheets

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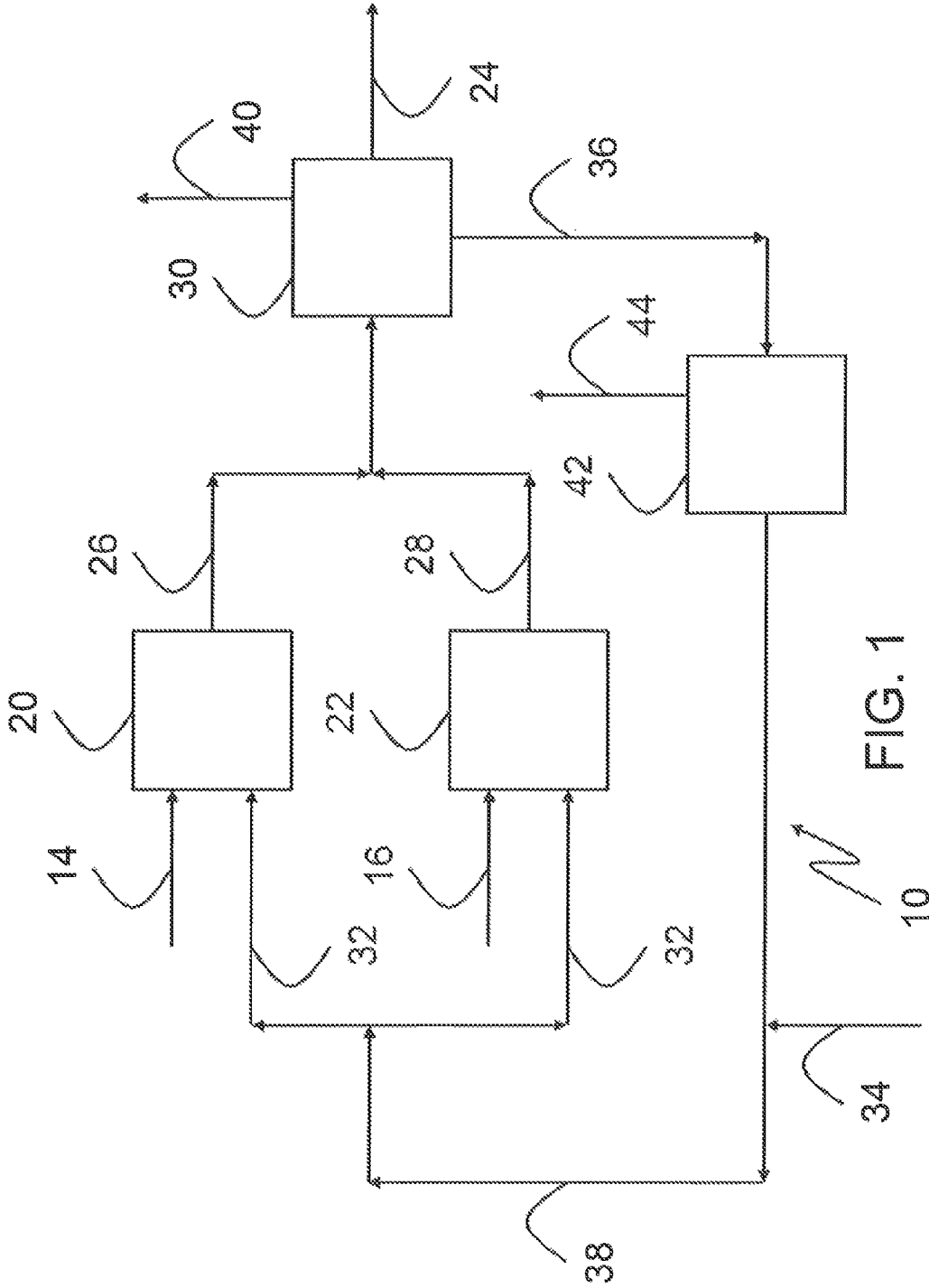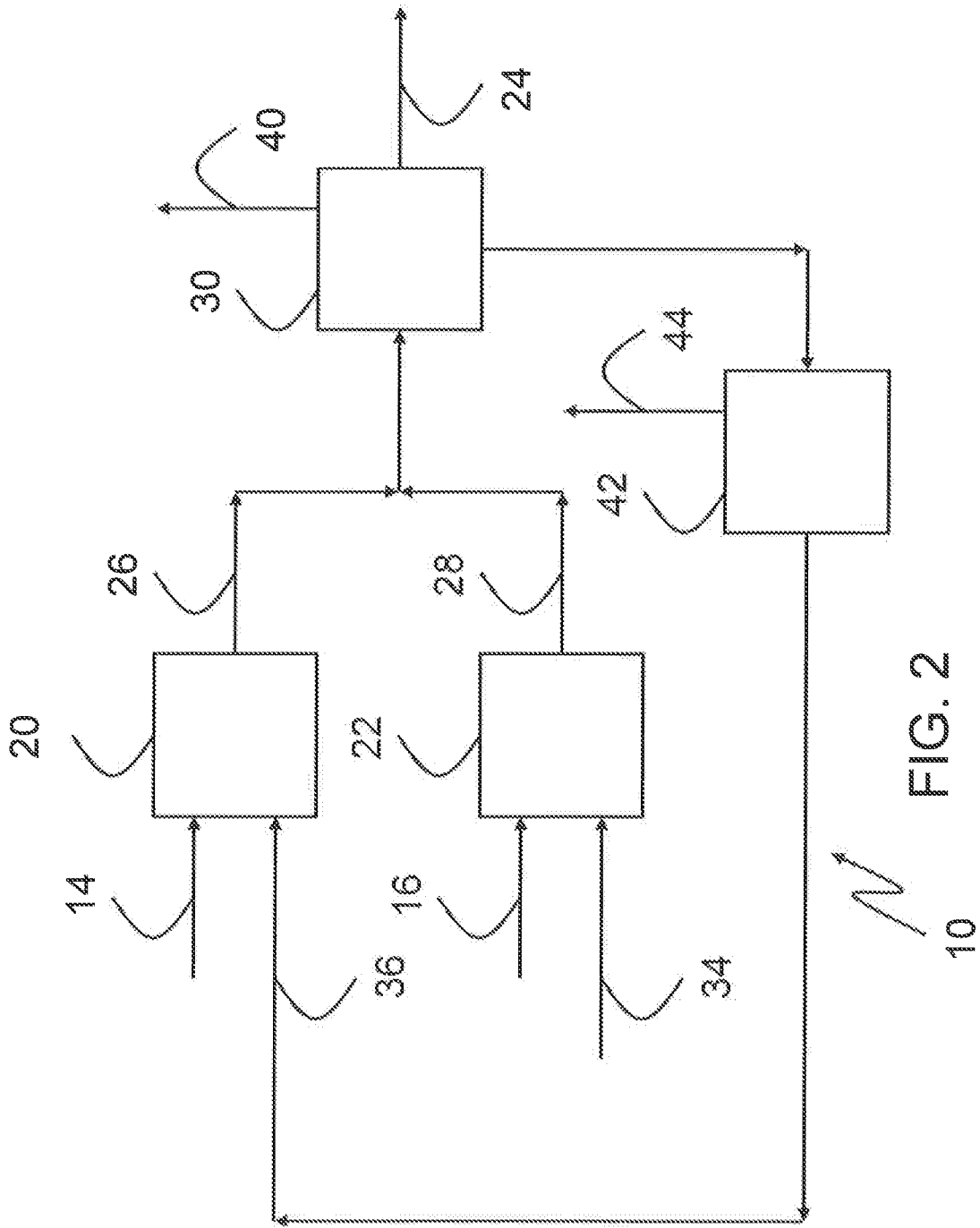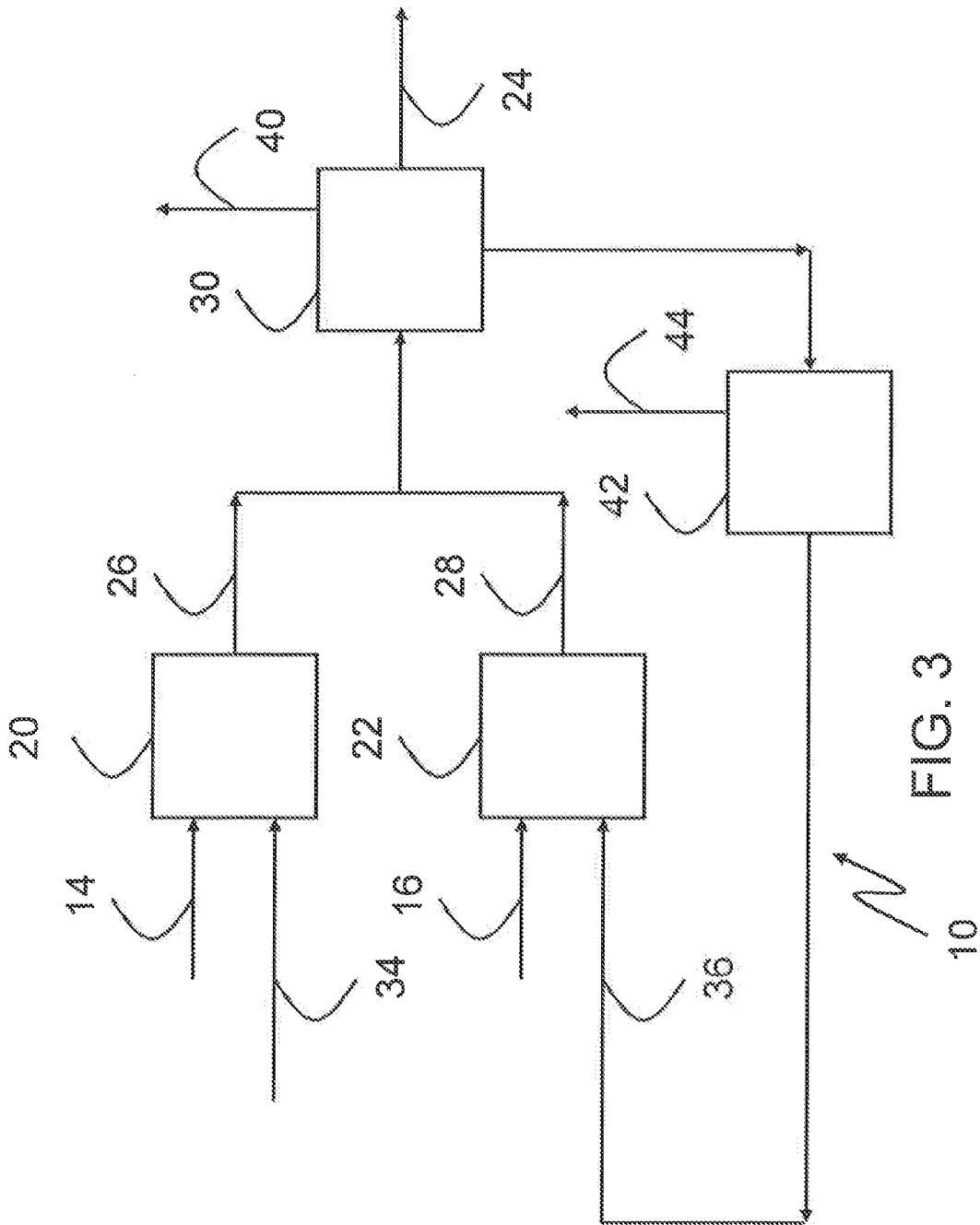
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FIG. 1

FIG. 2

FIG. 3

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