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(71) Applicant: **JOHNSON MATTHEY PUBLIC LIMITED COMPANY** [GB/GB]; 5th Floor, 25 Farringdon Street, London EC4A 4AB (GB).

(72) Inventors: **BABOVIC, Mileta**; Johnson Matthey PLC, PO Box 1, Belasis Avenue, Billingham Cleveland TS23 1LB (GB). **CARLSSON, Mikael**; Johnson Matthey PLC, PO Box 1, Belasis Avenue, Billingham Cleveland TS23 1LB (GB). **KENT, Mark Alexander**; Johnson Matthey PLC, PO Box 1, Belasis Avenue, Billingham Cleveland TS23 1LB (GB). **RICHARDSON, Andrew Edward**; Johnson

Matthey PLC, PO Box 1, Belasis Avenue, Billingham Cleveland TS23 1LB (GB).

(74) Agent: **RIDLAND, John**; Johnson Matthey PLC, PO Box 1, Belasis Avenue, Billingham Cleveland TS23 1LB (GB).

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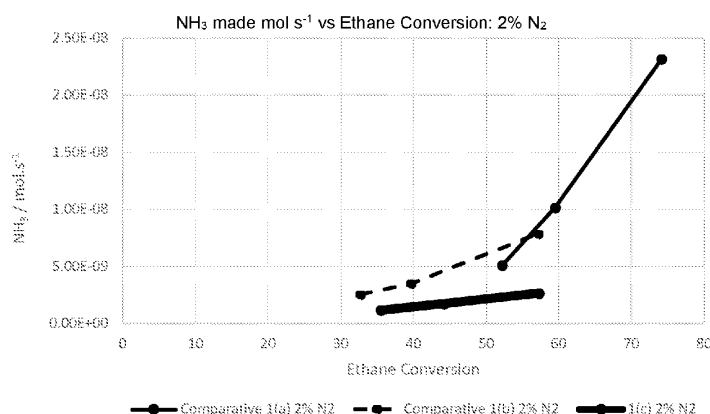


Figure 4

(57) Abstract: A process is described for steam reforming a hydrocarbon feedstock containing one or more nitrogen compounds, comprising passing a mixture of the hydrocarbon feedstock and steam through a catalyst bed consisting of one nickel steam reforming catalysts disposed within a plurality of externally heated tubes in a tubular steam reformer, wherein each tube has an inlet to which the mixture of hydrocarbon and steam is fed, an outlet from which a reformed gas containing hydrogen, carbon monoxide, carbon dioxide, steam, ammonia and methane is recovered, and the steam reforming catalyst at least at the outlet of the tubes is a particulate eggshell steam reforming catalyst comprising 2.5 to 9.5% by weight nickel, expressed as NiO, wherein the nickel is provided in a layer at the surface of the catalyst and the thickness of layer is in the range of 100 to 1000 μm.

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