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(54) Title: FLUID CATALYTIC CRACKING FEED INJECTOR

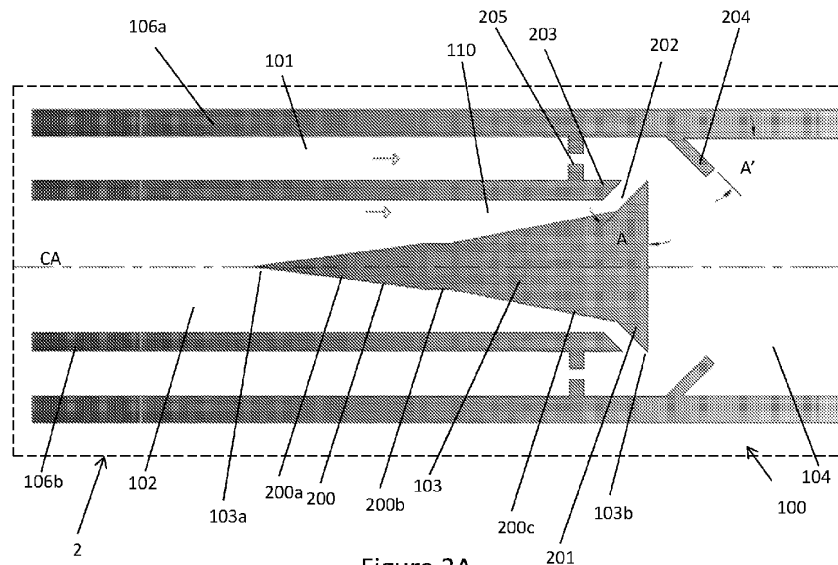


Figure 2A

(57) Abstract: A feed injector may have a body having an outer wall and an inner wall with a first conduit formed between the outer wall and the inner wall. The first conduit is configured to receive an atomizing gas. Additionally, a second conduit may be formed by the inner wall, and the second conduit is configured to receive a liquid. The first conduit and the second conduit are separated by the inner wall. Further, a mixing chamber may be provided at an outlet of the first conduit and an outlet of the second conduit. The atomizing gas from the first conduit and the liquid from the second conduit hit and/or mix together in the mixing chamber to form liquid droplets and a mixture of the atomizing gas and the liquid. Furthermore, a flow cone may have a first end in the second conduit and a second end in the mixing chamber.

[Continued on next page]

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