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(71) Applicant: **DOW GLOBAL TECHNOLOGIES LLC**
[US/US]; 2211 H.H. Dow Way, Midland, Michigan 48674
(US).

(72) Inventors: **PRETZ, Matthew T.**; 230 North Brazosport
Boulevard, Freeport, Texas 77541 (US). **SHAW, Donald
F.**; 7 Magnolia Avenue, Denville, New Jersey 07834 (US).
SANDOVAL, Fermin Alejandro; 1254 Enclave Park-
way, Houston, Texas 77077 (US). **WALTER, Richard Ed-
wards**; 157 Black River Road, Long Valley, New Jersey

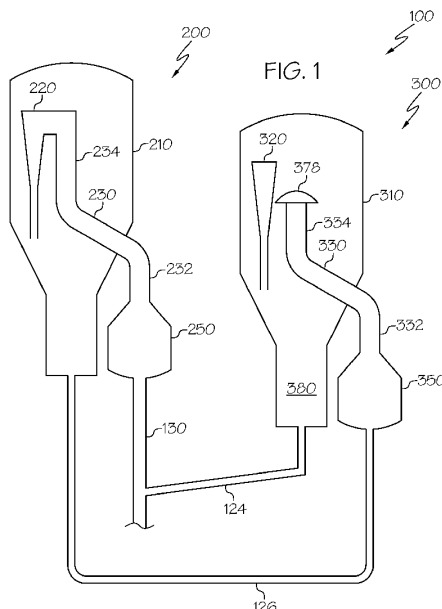
07853 (US). **MEZA, Albert**; 1254 Enclave Parkway, Hous-
ton, Texas 77077 (US).

(74) Agent: **INGLE, Cory J.** et al.; Dinsmore & Shohl LLP,
Fifth Third Center, One South Main Street, Suite 1300, Day-
ton, Ohio 45402 (US).

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(54) Title: SUPPORTED RISER APPARATUSES



(57) Abstract: A supported riser apparatus may be housed at least partial-
ly within a vessel. The supported riser apparatus may include a riser includ-
ing a non-vertical riser segment, a non-linear riser segment, and a vertical
riser segment. The supported riser apparatus may further include a support
member comprising a proximal end and a distal end. The proximal end of
the support member may be connected to the non-vertical riser segment and
the angle between the support member and the non-vertical riser segment
may be from 15 to 75. The supported riser apparatus may include a support
structure connected to the riser and the support member and an expansion
guide connected to an interior surface of the vessel. The expansion guide
may be shaped and positioned such that the support member slides across
the expansion guide as the support member undergoes thermal expansion or
thermal contraction.

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