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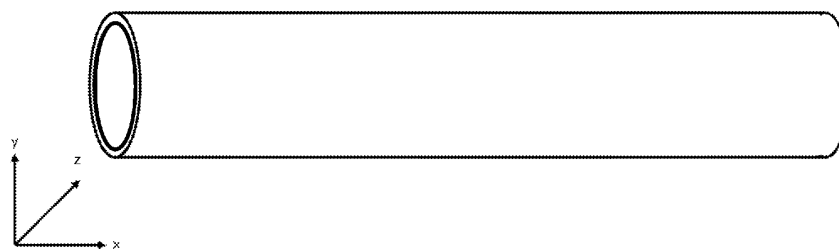


Fig. 1

(57) Abstract: A process for the catalytic cracking of ammonia, the process comprising: supplying an ammonia feed gas to one or more heated catalyst containing reaction vessels disposed within an ammonia cracking reactor; and cracking the ammonia in the ammonia feed gas in the one or more catalyst containing reaction vessels to produce a hydrogen containing stream, wherein the ammonia feed gas is fed into the or each reaction vessel at a pressure of at least 10 bar, wherein the or each reaction vessel is heated to a temperature of at least 500°C, and wherein the or each of the reaction vessels has a wall comprising or consisting of an alloy selected to be resistant to both nitriding and creep deformation at said temperature and pressure over an operating period of at least 1000 hours, 5000 hours, 10,000 hours, 50,000 hours, or 100,000 hours without failure.



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