

Lightweight Inorganic Membrane Module

Disclosure Number

201603753

Technology Summary

Disclosed is a manufacturing method and a lightweight scalable inorganic membrane module that reduces cost of fabrication and improves performance compared to standard ceramic honeycomb type membrane structures or tube and shell configurations. The separative layers can be made of either metals or ceramics to maximize thermal or chemical stability. In addition to higher membrane performance, the lightweight module is thermally conductive in cases where that is important. Both the shape of the module and the shape of the membrane channels can be customized to meet the needs of the specific application.

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