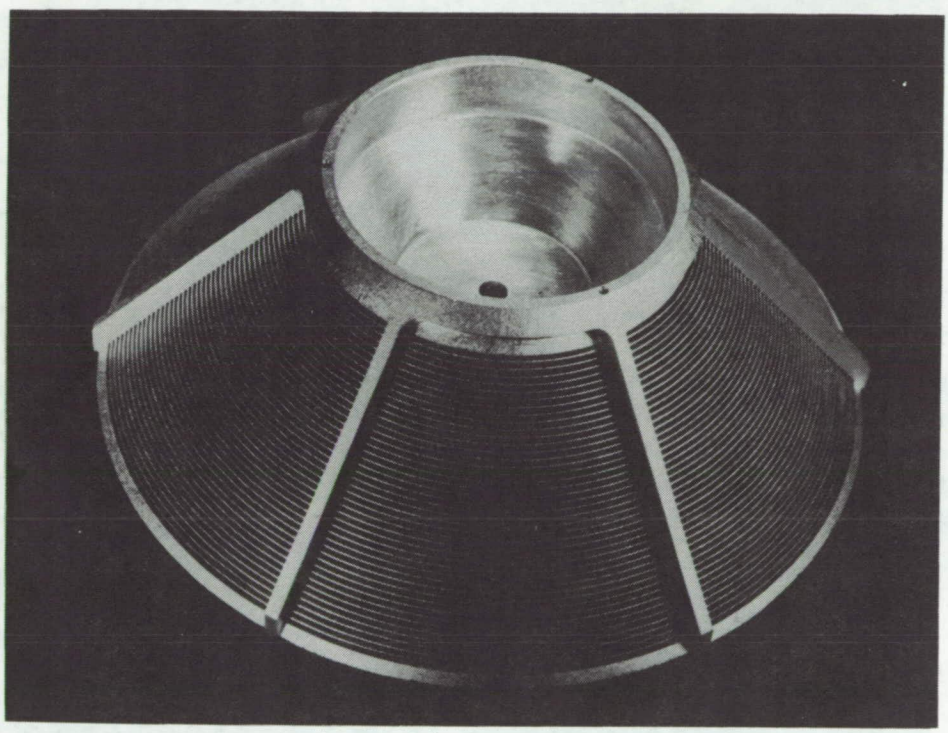
AEC-NASA TECH BRIEF
Lawrence Berkeley Laboratory

Efficient Baffle Prevents Oil Backstreaming in Difussion Pumps



A high-vacuum diffusion pump baffle, positioned immediately above the pump stack, prevents vaporized pumping oil from entering and contaminating the test chamber. The baffle (see figure) consists of a series of concentric rings between the top of the diffusion pump stack and the vacuum pump wall. The pumping vapor is collected and condensed on the baffle and flows back to the pump base along four rods. Although the baffle has no provisions for cooling, test results indicate a significant reduction in the backstreaming of vaporized pumping oil.

The central cup-shaped section extends downward over the stack, with the baffle section extending upward to the wall of the vacuum pump. Condensed pumping oil, collected on the baffle, flows away from the walls toward the rim of the central cup and then passes down to the reservoir at the pump base.

(continued overleaf)

Note:

Requests for further information may be directed to:

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Reference: B72-10475

Patent status:

No patent action is contemplated by AEC or NASA.

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