

## **Double metal replication of etched ion-track polymer membranes**

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Metal membranes encompassing on large areas with pores having diameters in the micrometer range at densities up to  $10^6$ - $10^7$  per  $\text{cm}^2$  can be produced by double metal replication. Polycarbonate foils irradiated with energetic heavy ions and etched are used as templates. The first replication of the pores in the organic foil is carried out by electrodeposition. The formation of the final metal membrane during the second replication continues by different methods depending on the metal required. The double replication technique can combine various metals and alloys with the exact replication of the initial template membrane or the production of composite metal foils. Related problems are discussed.