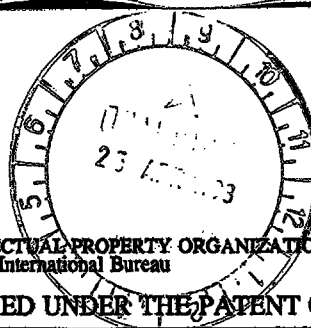


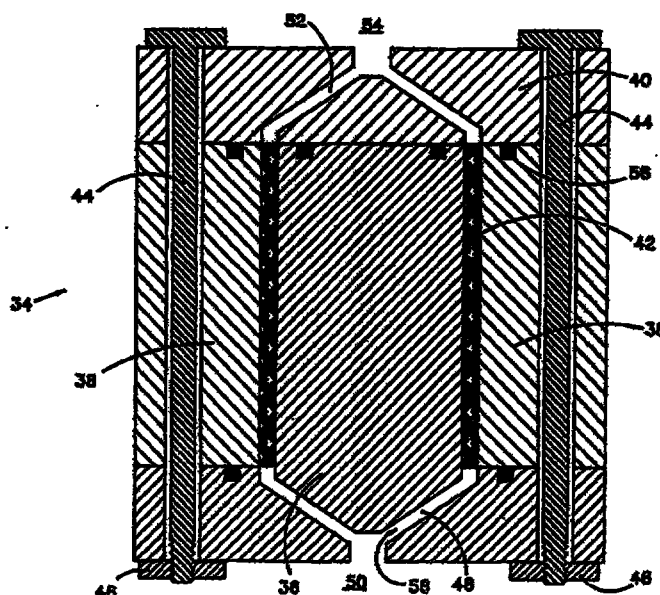
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(54) Title: CERAMIC LINER INFILTRATED WITH PRE-CERAMIC POLYMER RESIN



(57) Abstract

This invention relates to making cast metal parts with ceramic liners (12) for automobiles. The present invention solves over-exposure problems of metal parts subjected to increased temperatures and is embodied in a method of forming a ceramic (10) liner (12) for a part comprising the steps of, forming a liner of a ceramic material containing pores; filling the pores with a pre-ceramic polymer resin; and, firing the liner saturated with a pre-ceramic polymer resin at a temperature and for a time which converts the resin into a ceramic within the pores. The liner (12) can be mechanically attached, adhesively bonded, or a metal part can be cast onto the liner (12).