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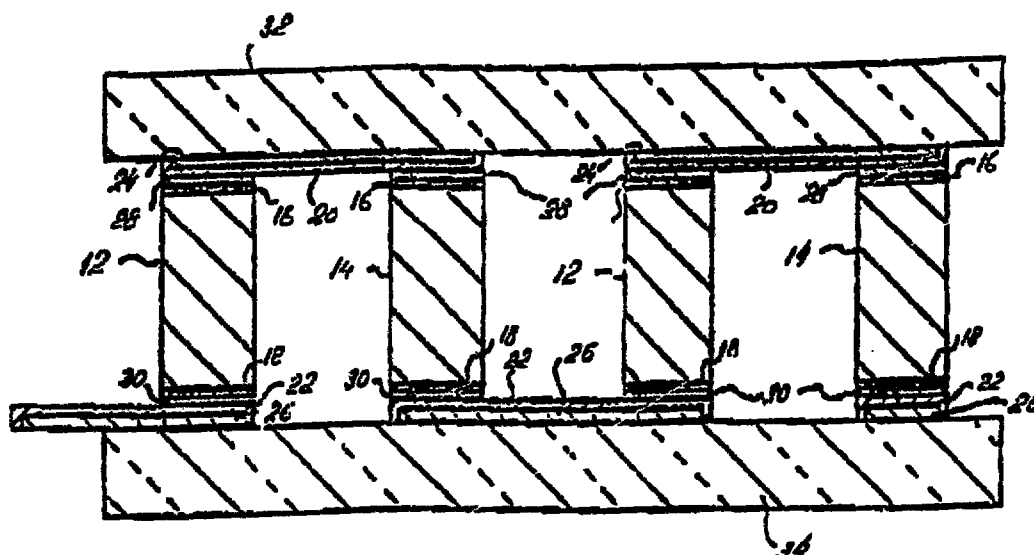
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(54) Title: FABRICATION OF THERMOELECTRIC MODULES AND SOLDER FOR SUCH FABRICATION



(57) Abstract

A thermoelectric module (10) is formed with solder joints (28, 30), the solder containing about 50 to 99 weight percent bismuth and about 50 to 1 weight percent antimony, between the thermoelectric elements (12, 14) and the connecting conductors (24, 26). Also provided is a thermoelectric module (10) having bismuth telluride elements (12, 14) coated with a conductive material (16, 18) that does not require a nickel or other diffusion barrier. Further provided are modules (10) having conductors (24, 26) with a phosphorus-nickel surface (20, 22). Methods of manufacturing and using such thermoelectric modules (10) are further provided.