

United States Patent [19]
Jones

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[54] **VACUUM FURNACE SYSTEM HEARTH**

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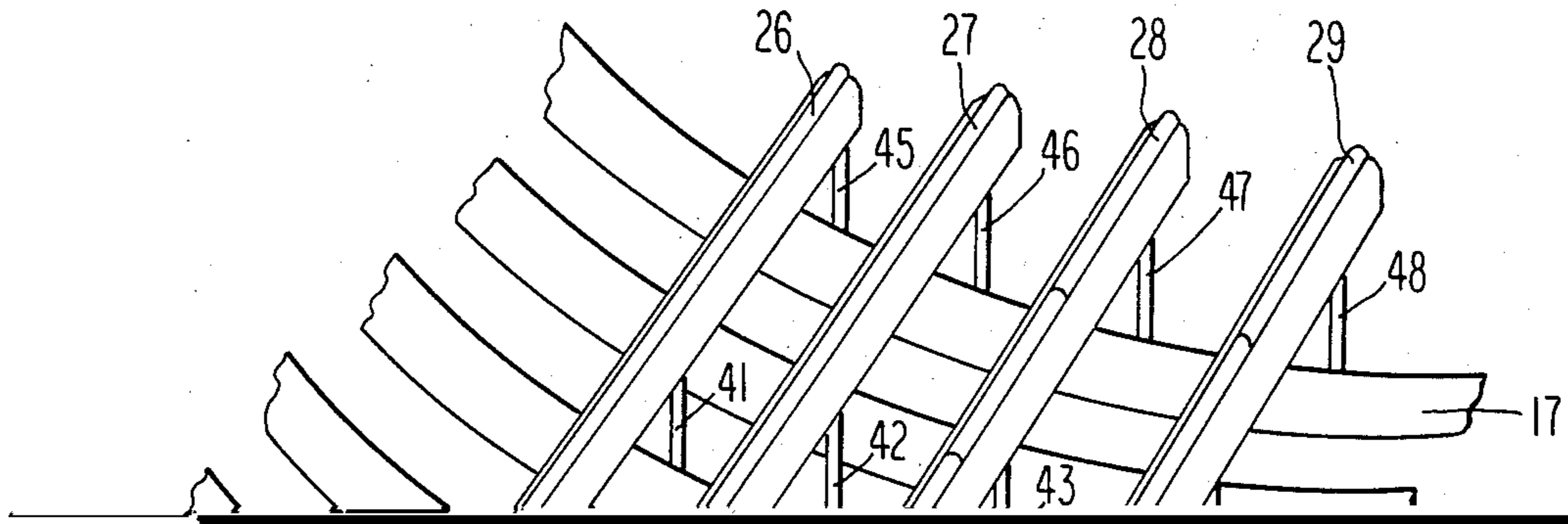
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[57] **ABSTRACT**

The present hearth is composed of a plurality of support

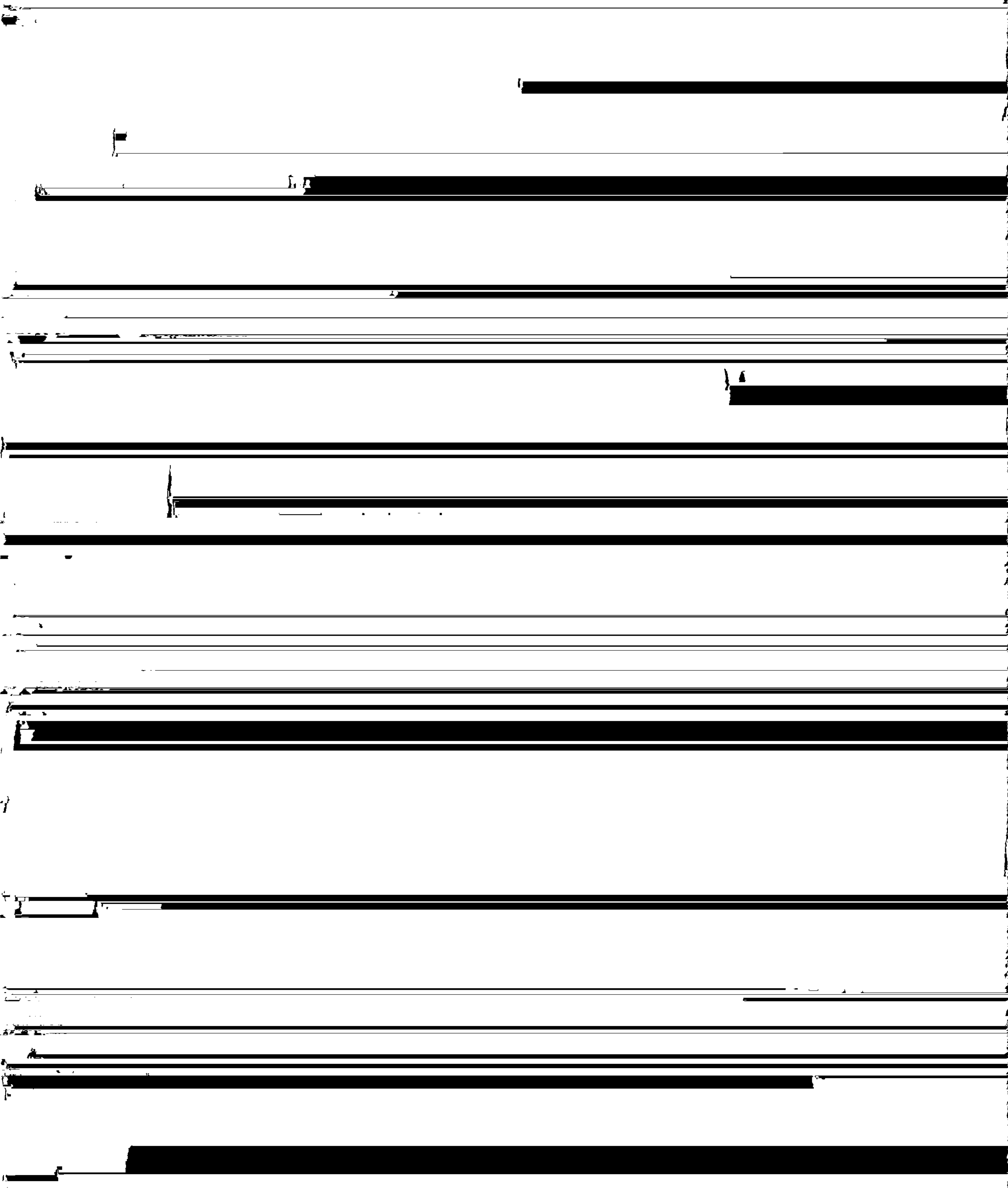


VACUUM FURNACE SYSTEM HEARTH

BACKGROUND

The objects and features of the present invention will be better understood in view of the following description taken in conjunction with the drawings wherein:

FIG. 1 is a pictorial schematic depicting four support



3

the four roller rods. In prior art configurations, wherein the roller rods are located parallel to the opening of the furnace, the load is rolled into the hot zone and at some instant in time the entire weight is loaded onto a single rod. Accordingly in such prior art arrangements the ceramic roller rods continually break due to their re-

4

weight is shared by all of the roller rods. The molybdenum rolling rods are coated or impregnated with titanium nitride by a chemical vapor deposition method. Other materials such as nitride or oxide compounds could be used as an interface, but I have found titanium nitride operates very satisfactorily.

sponse to thermal shock, the uneven distribution of weight during a loading operation, and the relative weakness of a ceramic material as compared to molib

I claim:

1. A hearth arrangement to be used in a hot zone of a vacuum furnace, which vacuum furnace has