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(12) **United States Design Patent**  
**Mira et al.**

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(54) **COMBINED LIQUID COOLING COLD  
PLATE AND VAPOR CHAMBER**

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(\*\*) Term: **15 Years**

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**Related U.S. Application Data**

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(51) **LOC (11) Cl.** ..... **13-03**

(52) **U.S. Cl.**  
USPC ..... **D13/179**

(58) **Field of Classification Search**  
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H05K 7/20336; H05K 7/20154; H05K  
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H01L 23/40; H01L 23/4006; H01L  
23/4093; H01L 23/427; H01L 23/46;  
F28D 15/0275; F28D 1/0426; F28D  
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2215/00; G06F 1/20  
See application file for complete search history.

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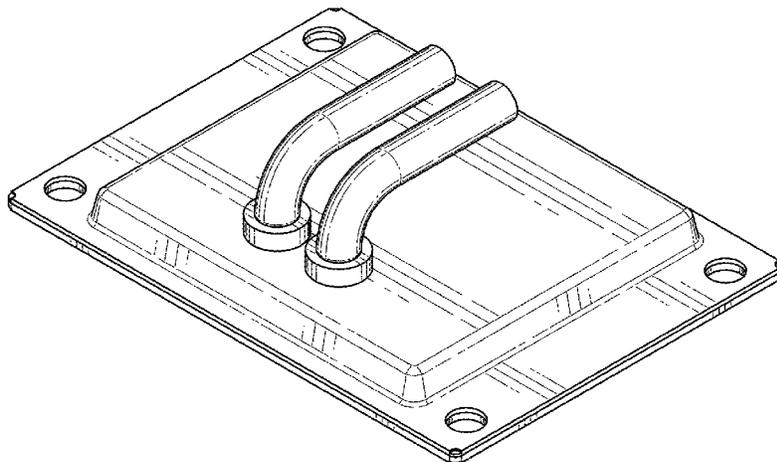
(57) **CLAIM**

The ornamental design for a combined liquid cooling cold plate and vapor chamber, as shown and described.

**DESCRIPTION**

FIG. 1 is a top perspective view of a combined liquid cooling cold plate and vapor chamber showing our new design; FIG. 2 is a top perspective disassembled view corresponding to FIG. 1; FIG. 3 is a left side elevational view of FIG. 1; FIG. 4 is a right side elevational view thereof; FIG. 5 is a rear elevational view thereof; FIG. 6 is a front elevational view thereof; FIG. 7 is a top plan view thereof; and, FIG. 8 is a bottom plan view thereof.

**1 Claim, 8 Drawing Sheets**



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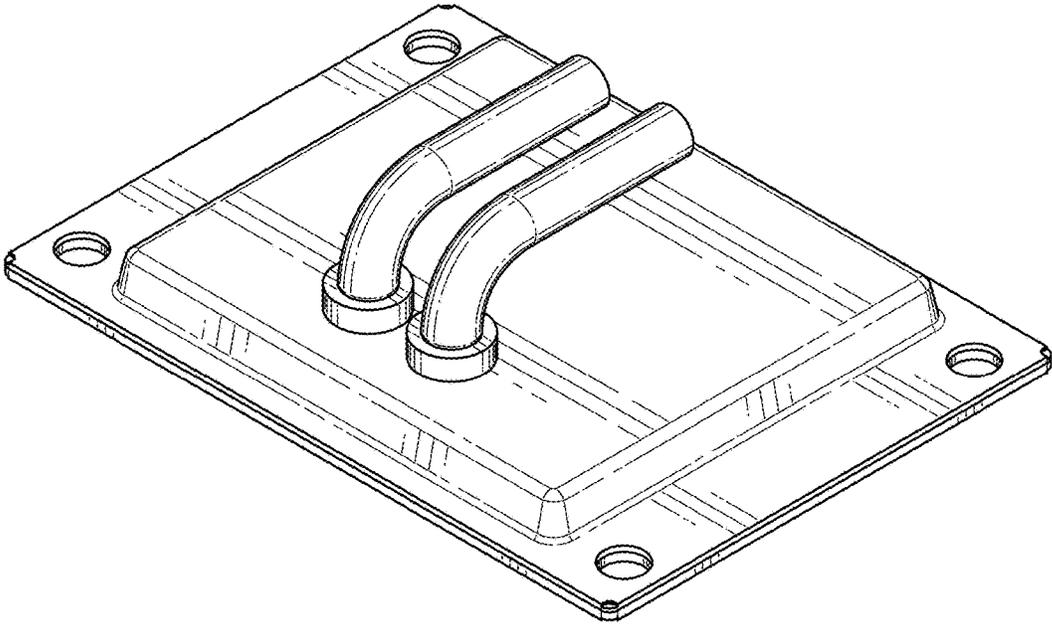


FIG. 1

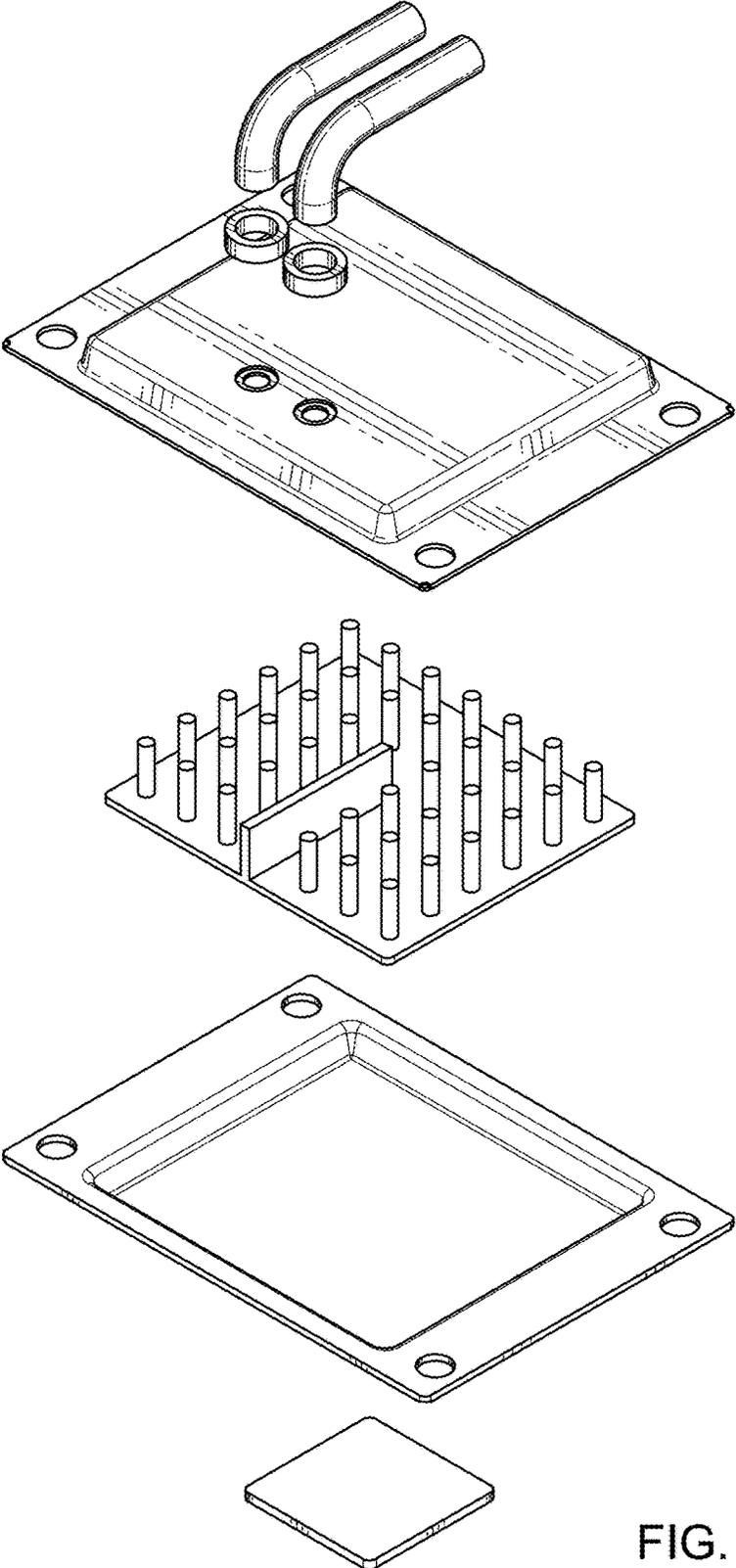


FIG. 2

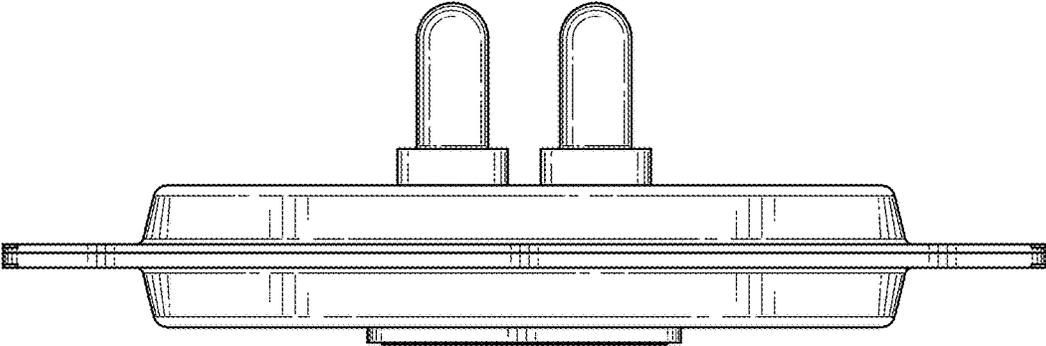


FIG. 3

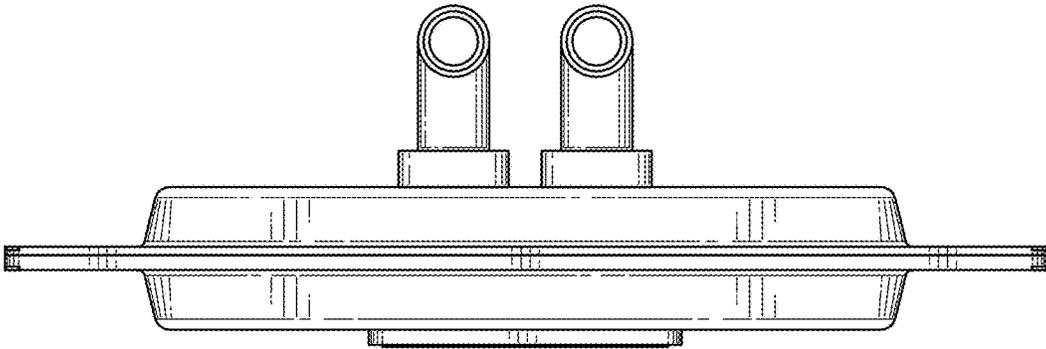


FIG. 4

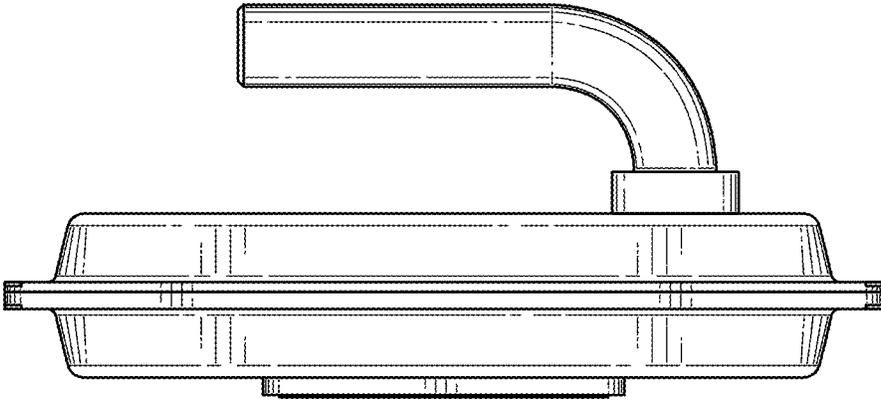


FIG. 5

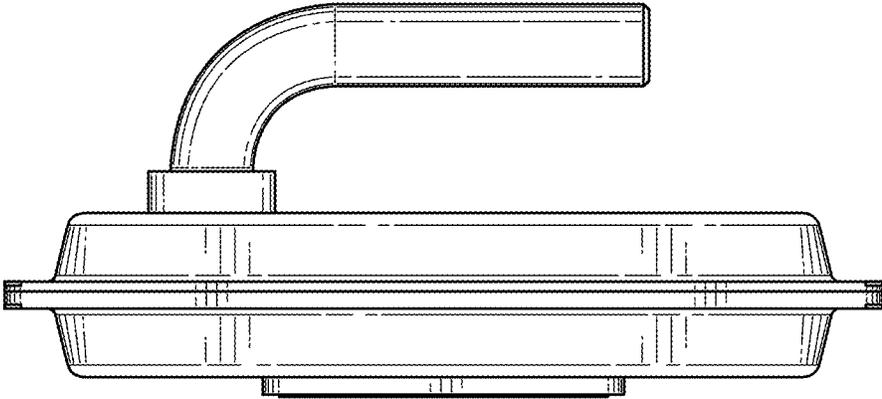


FIG. 6

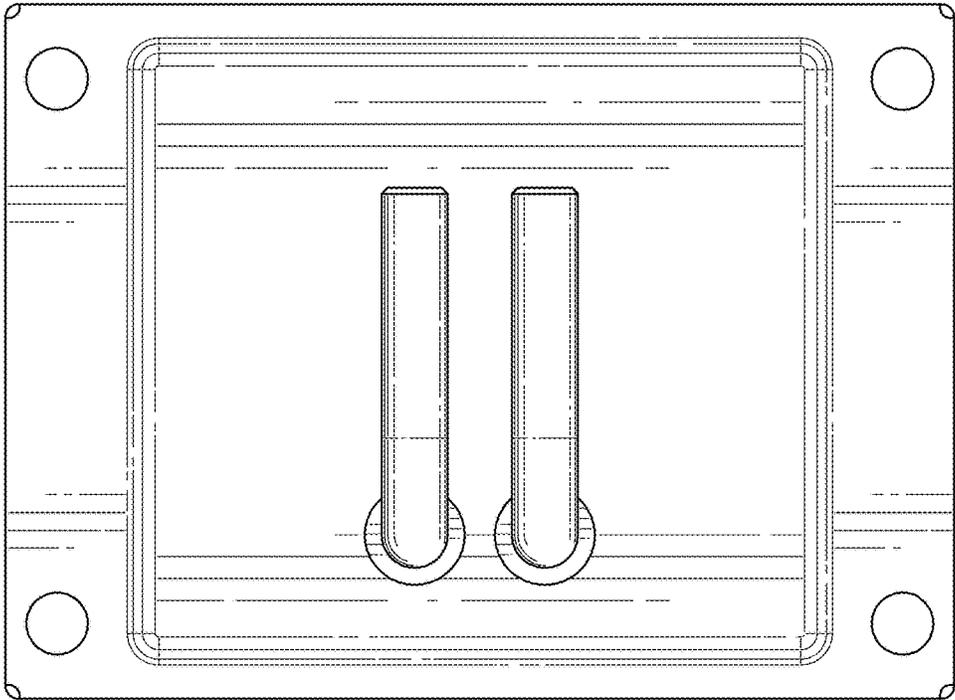


FIG. 7

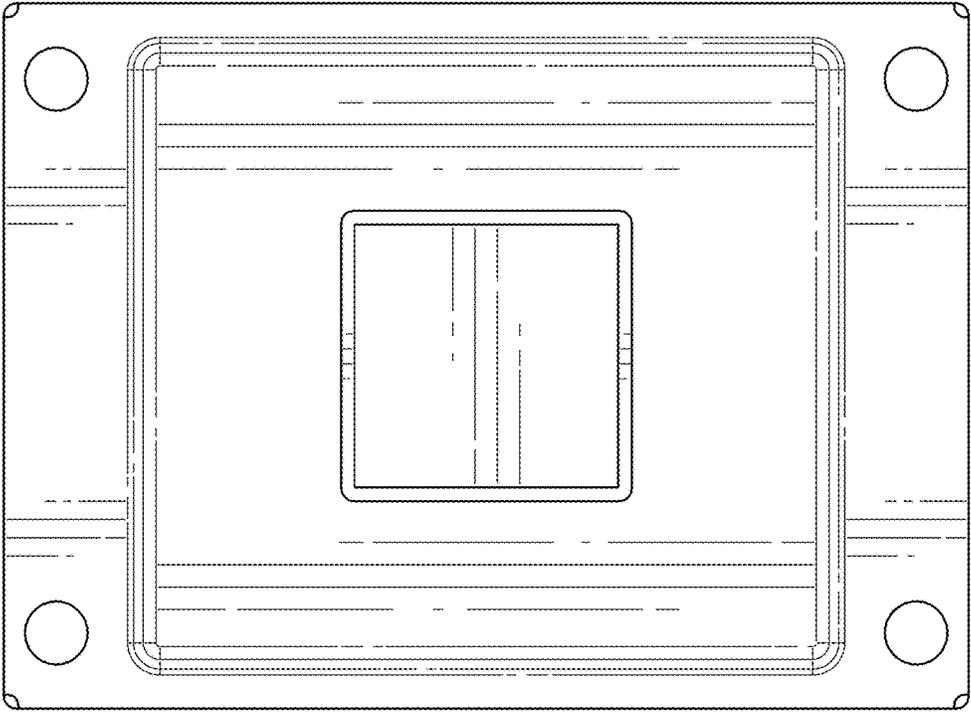


FIG. 8