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(54) **LOW-MELTING POINT INORGANIC NITRATE SALT HEAT TRANSFER FLUID**

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C09K 5/00 (2006.01)
C09K 5/04 (2006.01)

(52) **U.S. Cl.** **252/71**; 252/69; 252/67; 252/74

(58) **Field of Classification Search** 252/71, 252/74, 67, 69
See application file for complete search history.

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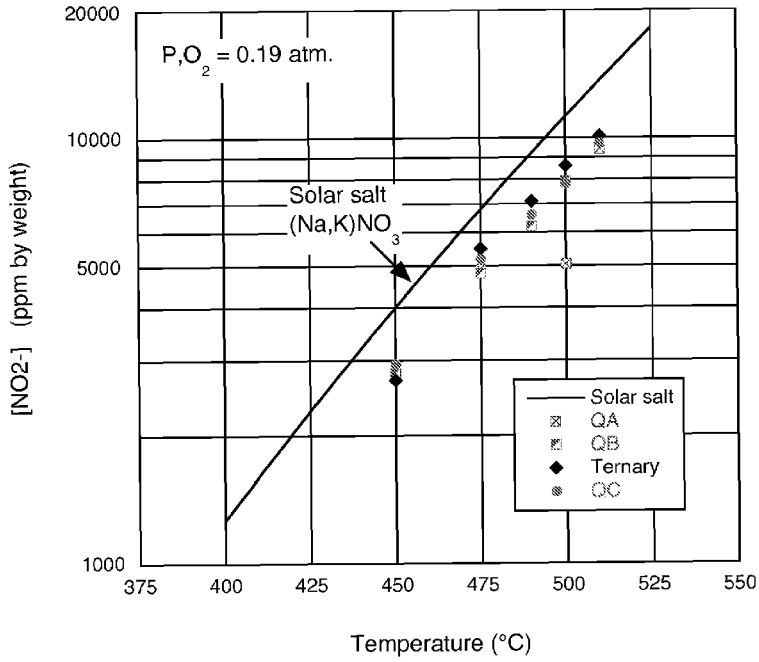
(57) **ABSTRACT**

A low-melting point, heat transfer fluid made of a mixture of four inorganic nitrate salts: 9-18 wt % $NaNO_3$, 40-52 wt % KNO_3, 13-21 wt % $LiNO_3$, and 20-27 wt % $Ca(NO_3)_2$. These compositions can have liquidus temperatures less than 100 C; thermal stability limits greater than 500 C; and viscosity in the range of 5-6 cP at 300 C; and 2-3 cP at 400 C.

13 Claims, 2 Drawing Sheets