

Multifunctional Surface Treatment For Car Air Conditioners

Hiroyoshi MIZUNO ^{*(1)}

Kazuhisa UCHIYAMA ^{*(2)}

Shigeyuki SATO ^{*(3)}

Kiyomi SAKAKIBARA ^{*(4)}

Ryosuke SAKO ^{*(5)}

Abstract

In order to improve corrosion resistance and thermal efficiency of the air conditioner evaporator, a coating which provides hydrophilicity was formed over the chromate coating. In addition to these requirements, there has been greater demand for air with fewer smells.

This report describes the cause of "dusty odor" and a method to reduce it. The dusty odor is caused by a little corrosion of the substrate aluminum. Hydrophilic coating film dissolves little by little in condensed water, and substrate aluminum is exposed. A method to prevent the odor was developed by forming a coating giving hydrophilicity and durability to the evaporator surface.