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(54) **HAPTIC INTERFACE DEVICE**

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(75) Inventors: **Kazuyuki Tsukamoto**,  
Ashigarakami-gun (JP); **Katsumi**  
**Sakamaki**, Ashigarakami-gun (JP);  
**Shin Takeuchi**, Ashigarakami-gun (JP)

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Correspondence Address:  
**OLIFF & BERRIDGE, PLC**  
**P.O. BOX 19928**  
**ALEXANDRIA, VA 22320 (US)**

(57) **ABSTRACT**

An enclosed driving section includes magnets provided on a bottom surface in such a manner that their polarities are alternately oriented, a movable frame which is contained in the case and to which coils are attached, and an operating member fixed on the frame. When a state sensor unit senses a state of a vehicle or outside the vehicle, such as omission to turn off lights and the direction of wind, a control section determines whether or not the sensed state should be indicated to an operator and, when it determines that the information should be indicated, passes an electric current through the coils in a predetermined direction to drive the driving section in order to communicate the information to the operator through a haptic stimulus. The haptic interface device can communicate various information to the operator through their sense of touch.

(73) Assignee: **FUJI XEROX CO., LTD.**, Tokyo (JP)

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