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(54) Title: ELECTRIC MOTORIZED SKATEBOARD WITH AN ACTUATOR ASSEMBLY WITH A FOOTPAD AND FORCE SENSOR

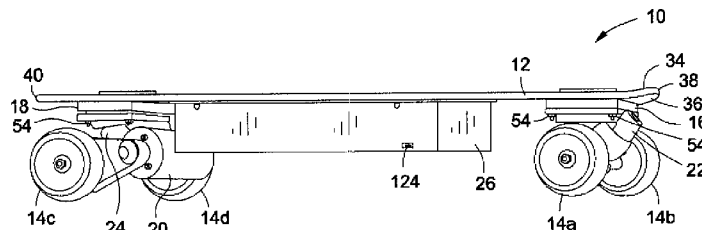


FIG. 3

(57) Abstract: There is provided an electric motorized skateboard. The skateboard includes a skateboard deck and wheels. The skateboard includes a first actuator with a footpad and a force sensor. The footpad is generally disposed at a deck top surface. The footpad and the force sensor are cooperatively sized and configured to translate force applied to the footpad to the force sensor. The force sensor is sized and configured to output a sensed signal in response to application of force upon the force sensor. The skateboard includes a controller in electrical communication with the force sensor. The controller receives the sensed signal and generates a motor input signal in response to the sensed signal. The skateboard includes an electric motor in mechanical communication with at least one of the wheels. The motor has a variable electric motor output in response to a value of a motor input signal.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - B62M 1/20; A63C 17/12, 17/26 (2013.01)

USPC - 280/87.042; 180/65.1

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

MicroPatent (US-G, US-A, EP-A, EP-B, WO, JP-bib, DE-C,B, DE-A, DE-T, DE-U, GB-A, FR-A); IP.com; Google/Google Scholar; DialogPRO; Search Terms Used: electric*, skateboard, longboard, motor, controller, drive*, resistor, signal, accelerat*, decelerat*, user, profile, rider

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|--|-----------------------|
| X | US 6,050,357 A (Staelin, et al.) April 18, 2000; figures 1a, 1b; column 5, lines 5-11 lines and 39-47; column 6, lines 1-22; column 7, lines 45-55; column 8, lines 20-40; column 9, lines 35-45; column 12, lines 43 and 44; column 16, lines 35-45 | 1-5, 8-16 |
| A | US 7,198,280 B2 (HARA) Aril 3, 2007, figure 1, column 1, lines 41-65 | 1-16 |

Further documents are listed in the continuation of Box C.

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