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(54) Title: LAWN MOWER WITH SUSPENDED ERGONOMIC SEAT

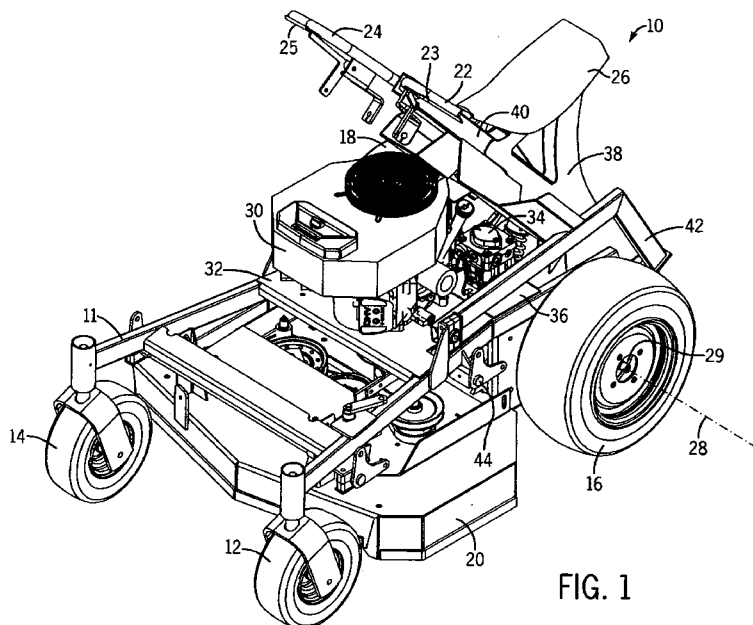


FIG. 1

(57) Abstract: Embodiments of the invention provide a lawn mower including a frame, a seat or operator station, one or more handles, and a suspension unit coupled between the frame and the seat or operator station. The lawn mower can include one or more pivot members with a first portion coupled to the frame at a pivot location forward of the seat or operator station and a second portion coupled to the seat or operator station. The one or more pivot members can allow the seat or operator station and the one or more handles to move with respect to the frame while the suspension unit absorbs a portion of shock caused by riding over the uneven terrain. The seat can be positioned at least partially between a first drive wheel and a second drive wheel and at least partially along a drive axis. The seat can be declined with respect to a horizontal plane so that the operator's upper torso leans forward at an angle with respect to a vertical plane when the operator is sitting on the seat.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - A01D 43/00 (2009.01)

USPC - 56/153

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)

USPC: 56/153

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
 USPC: 56/10.8, 131, 154, 155, 156, 157, 323, DIG10; 297/195.1, 313, 423.1, 423.11; 248/371; 280/755; 296/65.02; 180/900, 89.12; 74/473.16 (text search - see terms below)

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

PubWEST(USPT, PGPB, EPAB, JPAB); Google Patents; Google.

Search Terms: mower, vehicle, frame, seat, chair, stool, handle, steering, suspension, spring, biasing, wheels, pivot, support.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,367,864 A (OGASAWARA et al.) 29 November 1994 (29.11.1994) FIG. 1, 2, col 1, from ln 53 to col 2, ln 4, col 2, ln 50-60, col 3, ln 8-19, 22-26, 47-50	1-51, 57
Y	US 5,913,802 A (MULLET et al.) 22 June 1999 (22.06.1999), FIG. 1, 3, 4, 5, col 3, ln 13-46, col 4, ln 19-67	1-51, 56
Y	US 6,205,753 B1 (VELKE et al.) 27 March 2001 (27.03.2001), FIG. 1, 4, 8, col 3, ln 55-65, col 4, ln 3-7, 37-39, 58-65, col 7, ln 49-62	17, 18, 47, 48, 52-61
Y	US 2007/0034435 A1 (BERG et al.) 15 February 2007 (15.02.2007), FIG. 2C, 9, 11, 12, para [0037], [0039], [0043], [0055], [0056]	22-29, 30, 52-67
Y	US 6,490,849 B1 (SCAG et al.) 10 December 2002 (10.12.2002), FIG. 1, 6, 7A, 7B, col 4, ln 3-9, 32-34, 45-47, col 5, ln 23-35, 49-51	62-67
Y	US 2008/0034958 A1 (KORTHALS) 14 February 2008 (14.02.2008), FIG. 1, 2, 4, abstract, para [0018], [0019]	6, 7, 36, 37
Y	US 6,845,829 B2 (HAFENDORFER) 25 January 2005 (25.01.2005), col 1, ln 61-63, col 4, ln 48-51, col 6, ln 38-42, 60-64, 65-67, col 7, ln 44-50	12, 13, 15-19, 22-29, 30, 42, 43, 45-49, 53-61
Y	US 3,774,711 A (LACEY) 27 November 1973 (27.11.1973), FIG. 1, col 1, from ln 49 to col 2, ln 8	66

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