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(12) **United States Patent**  
**Huntsberger et al.**

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- (54) **STEERING ASSEMBLY FOR CHILDREN'S RIDE ON VEHICLES**
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- (\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

4,516,648 A	5/1985	Berger et al.	
4,580,802 A *	4/1986	Herman et al. ....	280/267
4,624,469 A *	11/1986	Bourne, Jr. ....	180/210
4,705,449 A	11/1987	Christianson et al.	
D303,776 S	10/1989	Aker	
D314,389 S	2/1991	Lynnes et al.	
5,409,263 A	4/1995	Klawitter	
D368,743 S	4/1996	Amburgey et al.	
5,762,351 A *	6/1998	SooHoo .....	180/210
5,845,724 A *	12/1998	Barrett .....	180/65.1
5,901,973 A *	5/1999	Warren .....	280/267
5,931,244 A *	8/1999	Renfroe et al. ....	280/93.51
6,105,982 A	8/2000	Howell et al.	
D431,845 S *	10/2000	Huntsberger .....	D21/434
6,170,354 B1 *	1/2001	Lee .....	280/93.51
6,186,256 B1 *	2/2001	Dignitti .....	180/68.5
6,330,926 B1 *	12/2001	Heimbrock et al. ....	180/65.1
6,352,274 B1 *	3/2002	Redman .....	280/248
6,367,824 B1 *	4/2002	Hayashi .....	280/124.103

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(65) **Prior Publication Data**

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- (51) **Int. Cl.**<sup>7</sup> ..... **B60K 1/00**; B62D 7/20
- (52) **U.S. Cl.** ..... **180/65.1**; 280/267; 280/93.51
- (58) **Field of Search** ..... 180/65.1; 280/267, 280/269, 93.51, 93.515

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

1,217,704 A	2/1917	Ciaffone	
D218,630 S	9/1970	Steele	
3,669,468 A	6/1972	Rich	
3,768,825 A *	10/1973	Magnusson .....	280/96
3,960,392 A	6/1976	Read	
4,103,921 A	8/1978	Brooks et al.	
4,165,094 A *	8/1979	Onda .....	280/269
4,186,935 A *	2/1980	Rudwick .....	280/269
4,460,190 A *	7/1984	Spiess .....	280/247
4,469,344 A *	9/1984	Coil .....	280/269
4,497,502 A *	2/1985	Forbes et al. ....	280/269

**OTHER PUBLICATIONS**

Caterpillar® Dump Truck Owner's Manual, Power Wheels by Fisher-Price, 1999.  
 Caterpillar® Front Loader Jr. Owner's Manual, Power Wheels by Fisher-Price, 1997.

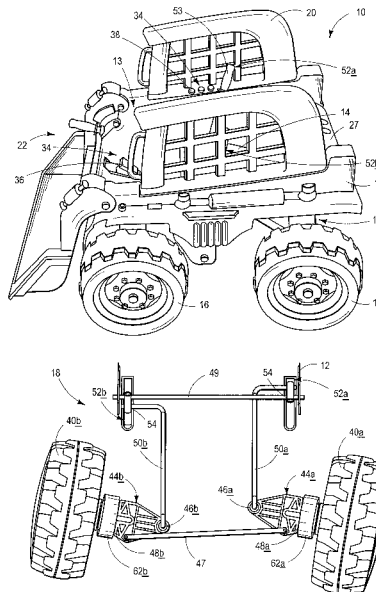
\* cited by examiner

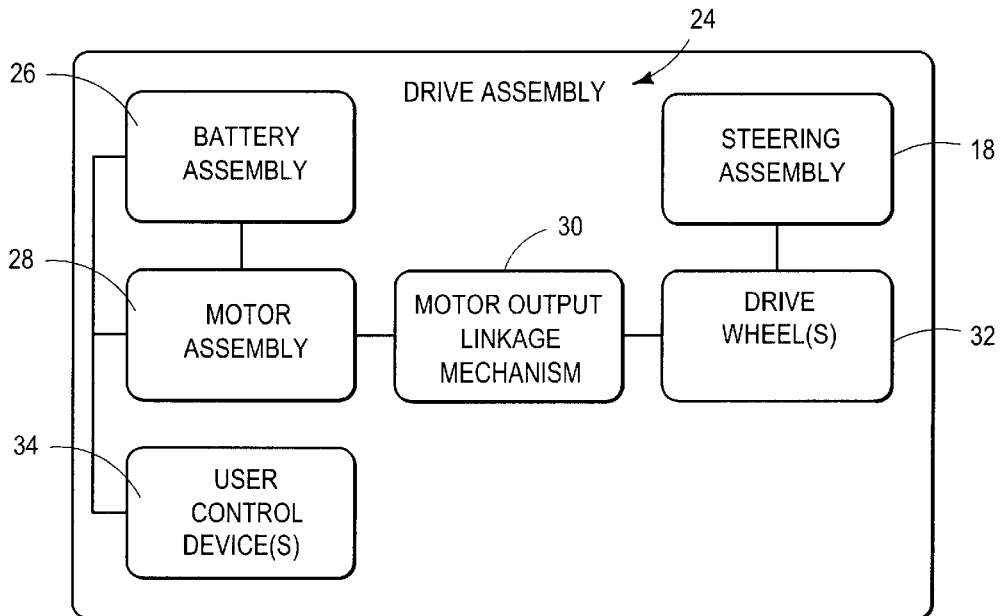
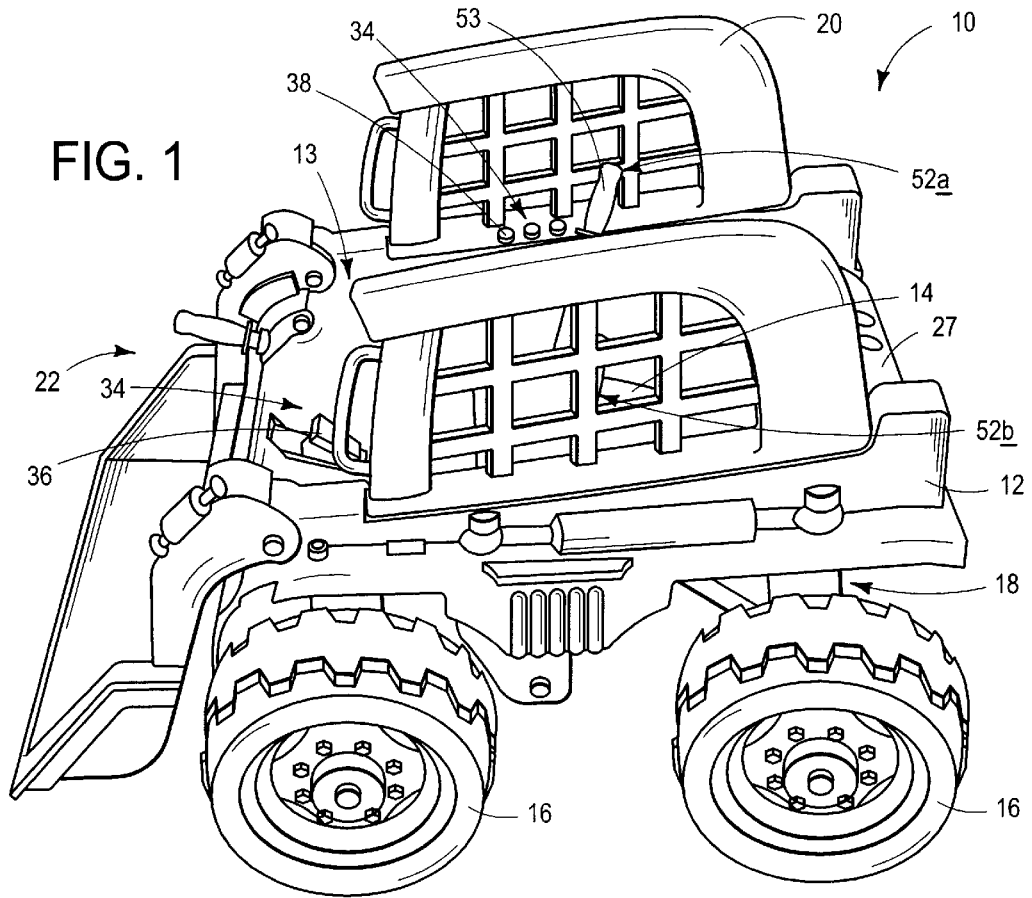
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(57) **ABSTRACT**

A steering assembly for a children's ride-on vehicle having a pair of wheels. The assembly includes a pair of pivotal control arms that are coupled to the pair of wheels. The pair of pivotal control arms is also coupled to a pair of moveable handles that operate in tandem and move reciprocally to steer the pair of wheels.

**23 Claims, 6 Drawing Sheets**





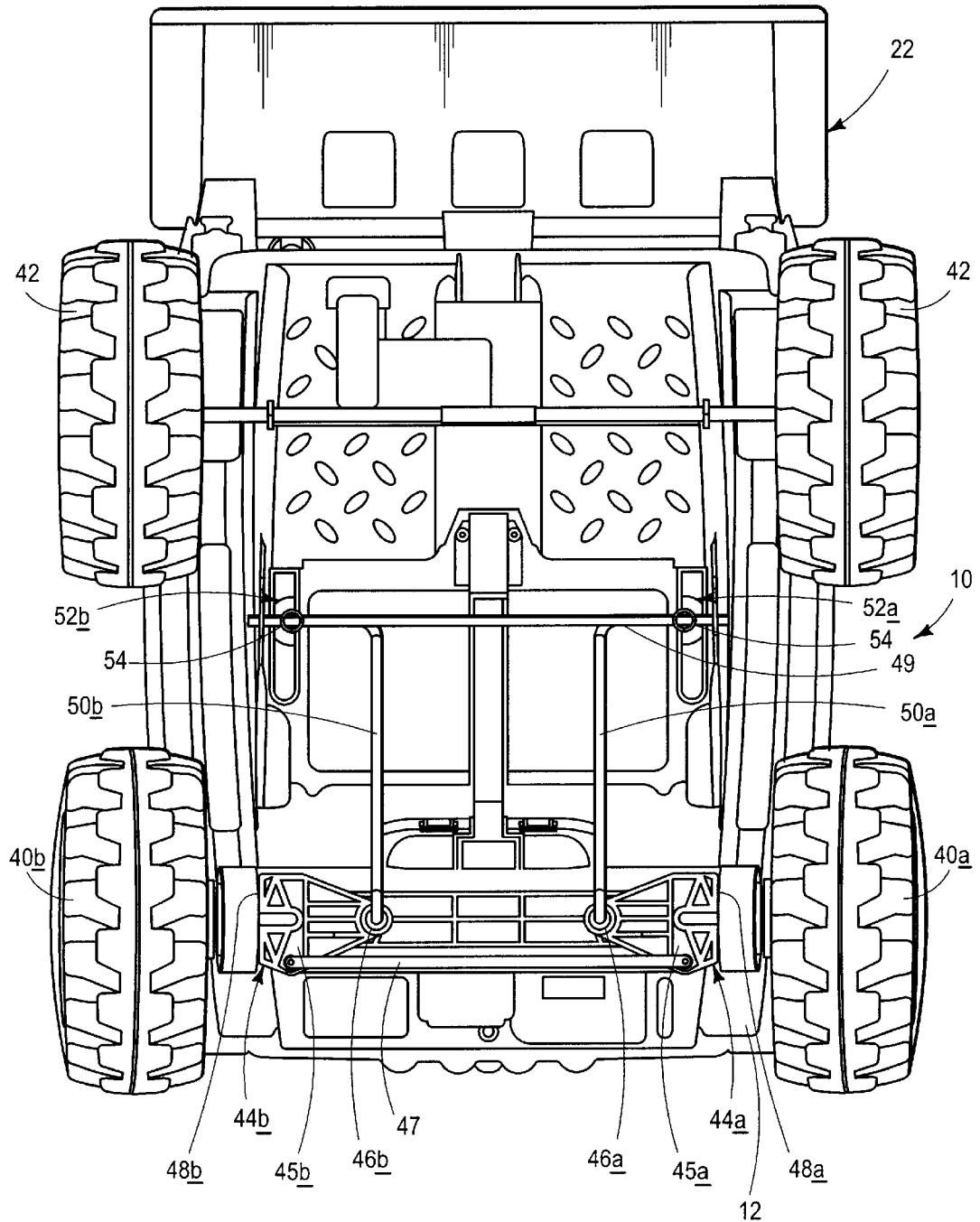


FIG. 3

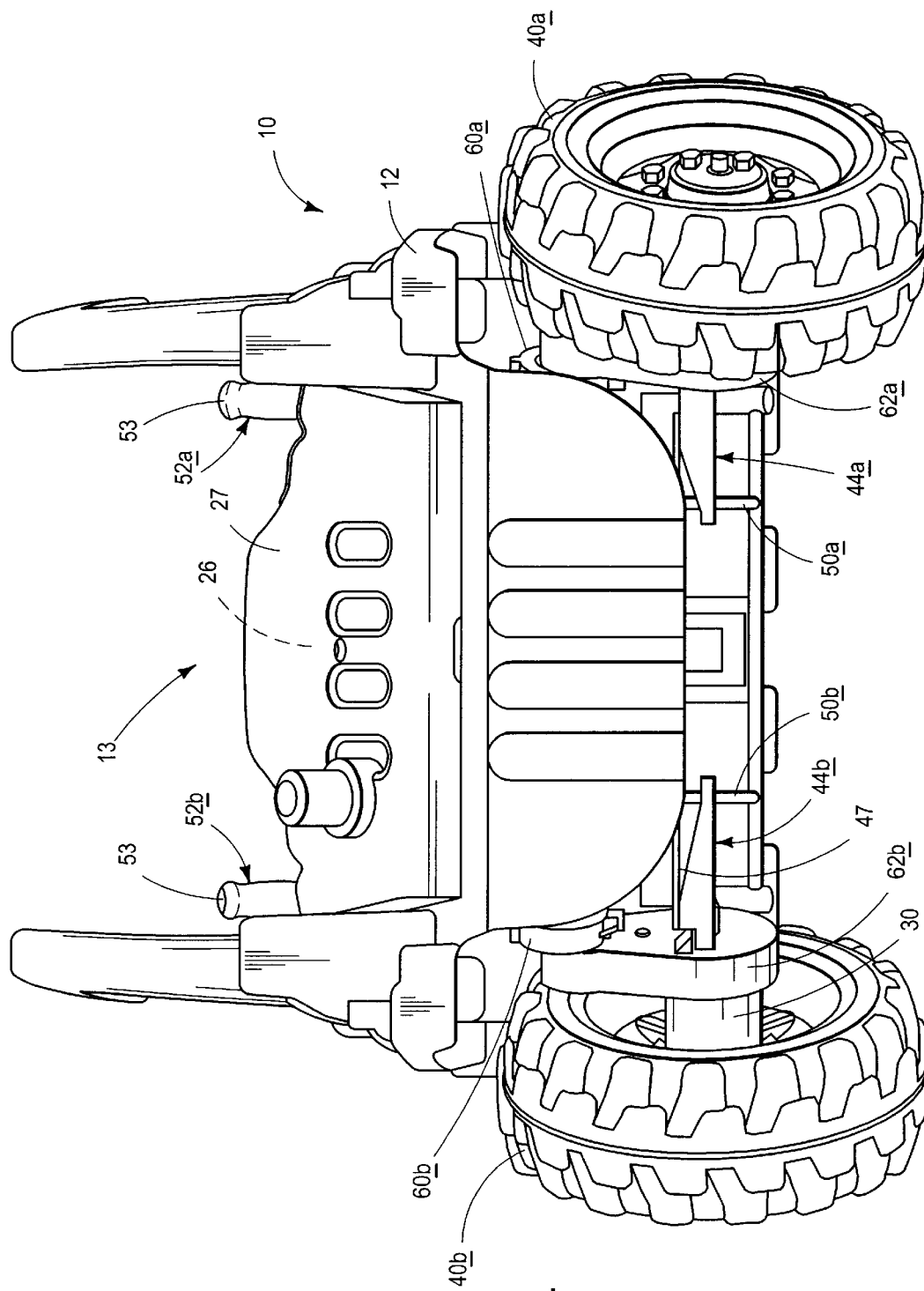


FIG. 4

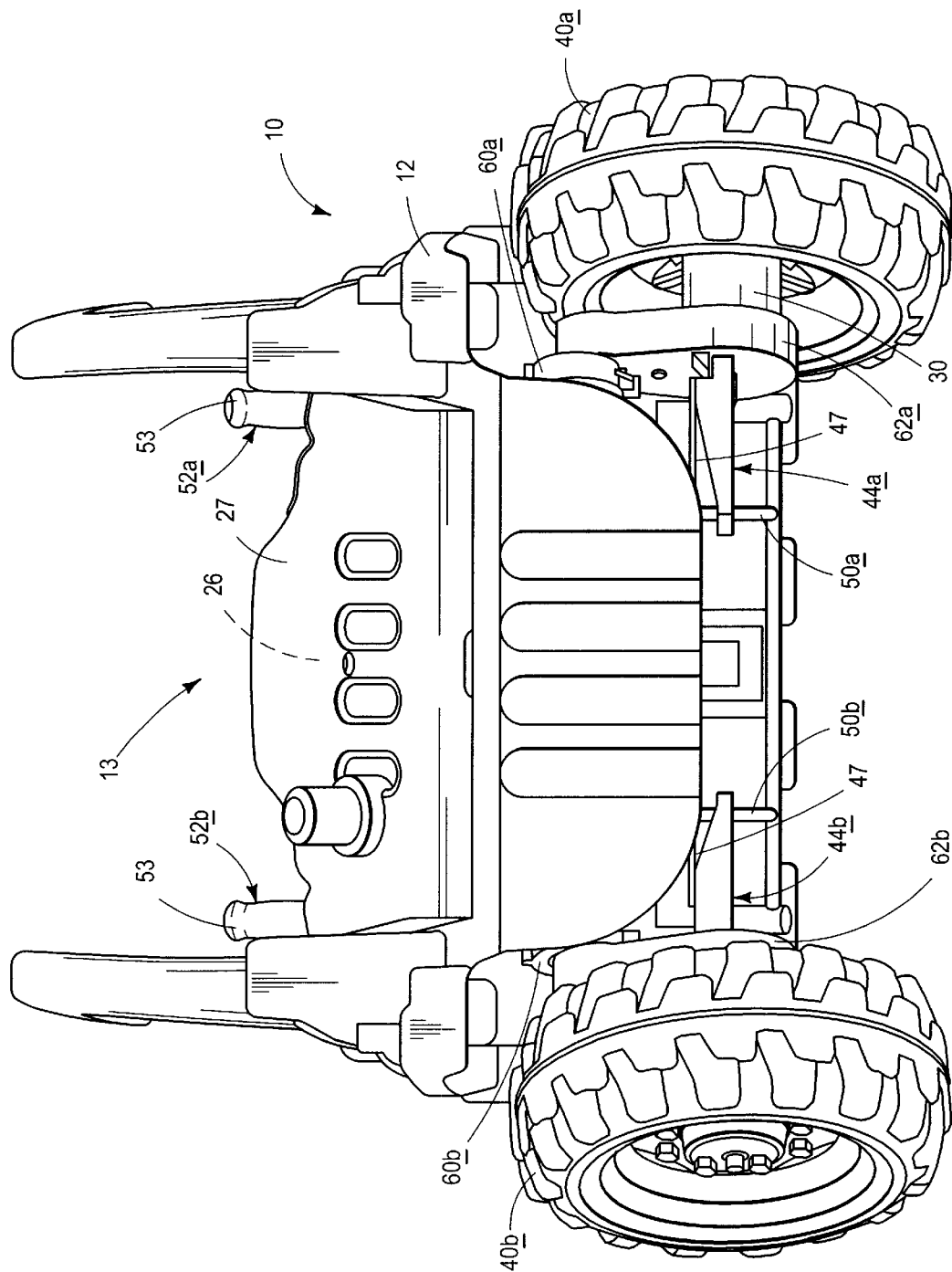


FIG. 5

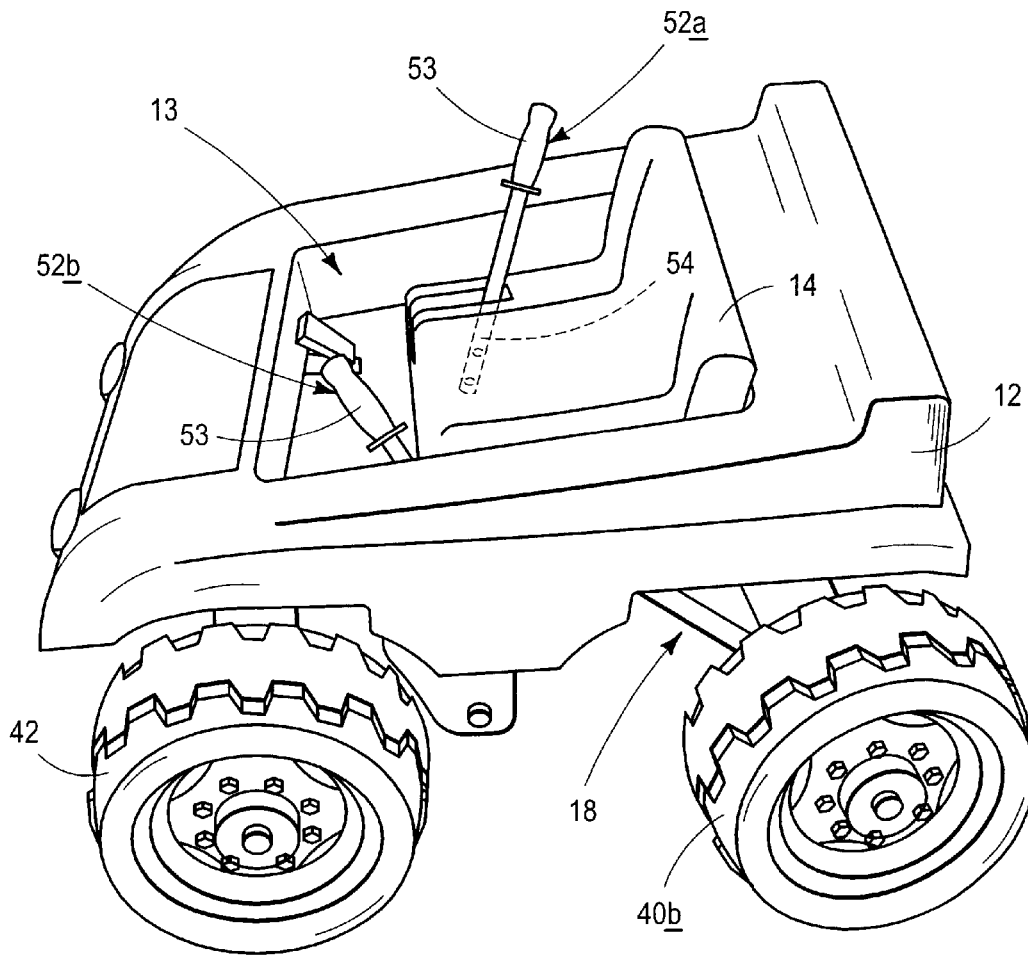


FIG. 6

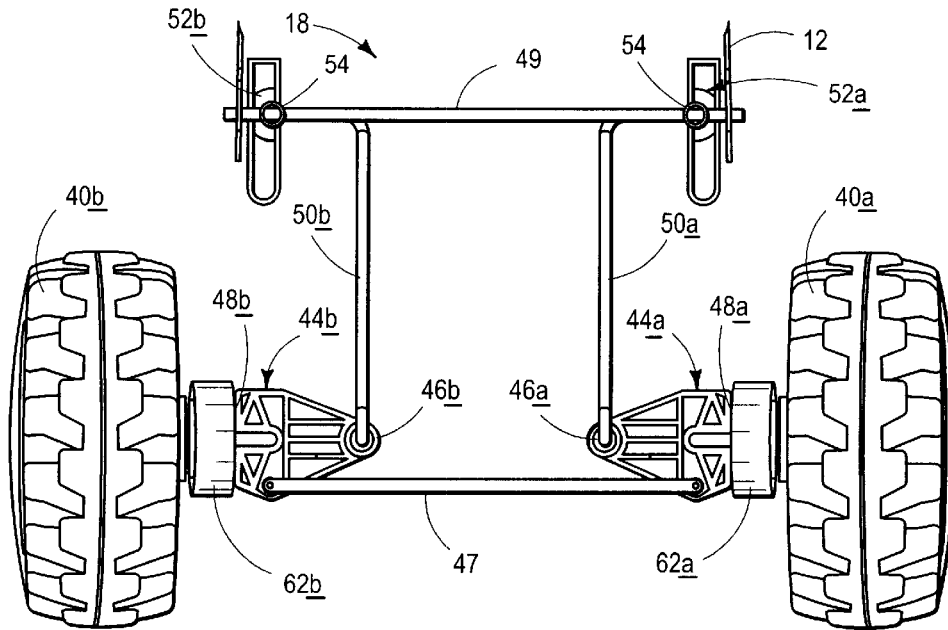


FIG. 7

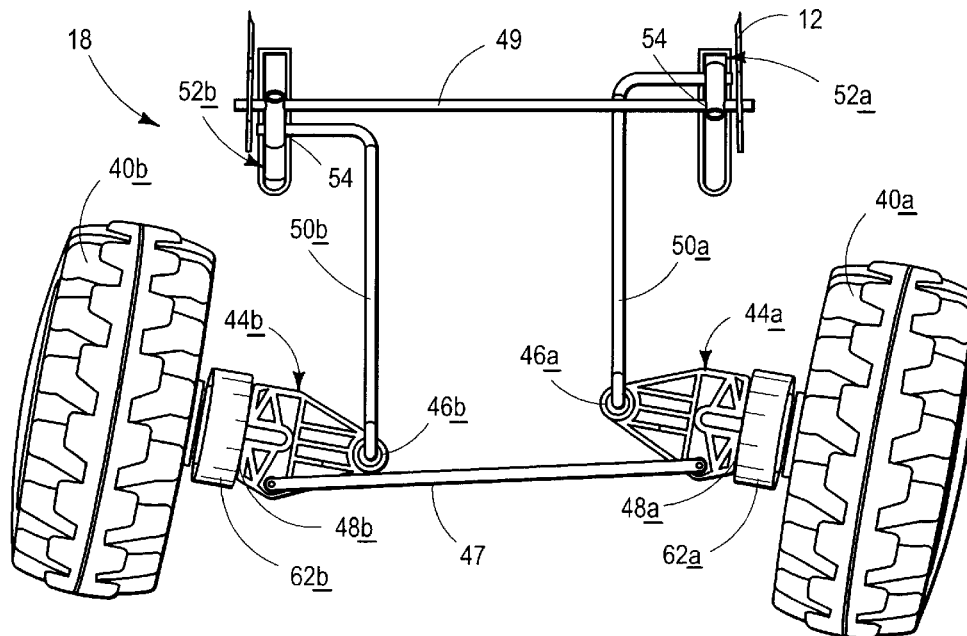


FIG. 8