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Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

(54) Title: SYSTEMS AND METHODS FOR TRANSMITTING TORQUE WITHOUT THE USE OF A GEARBOX

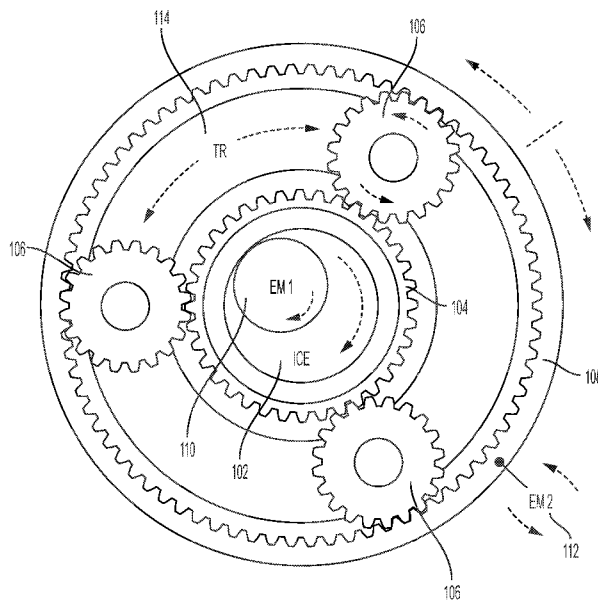


FIG. 1

(57) Abstract: A drive mechanism includes one or more planetary gear systems, each of the planetary gear systems including one or more central sun gears, one or more outer ring gears, and one or more carrier gears linking the one or more central sun gears to the one or more outer ring gears, each of the planetary gear systems being connected to one or more energy sources. One or more of the energy sources acts as a regulator of the output revolutions of one or more of the planetary gear systems, in such a way that a ratio of input rpm and power to output rpm and power of the one or more of the planetary gear systems is selectively variable, allowing the output rpm to scale progressively from a stop to any higher rpm the drive mechanism can achieve, without the need for a gearbox.



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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)

See Search History Document

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

See Search History Document

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

See Search History Document

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X, P	US 2019/0100094 A1 (TWO HEADS, LLC) 4 April 2019 (04.04.2019), entire document	1-18
X	US 2017/0246947 A1 (OSHKOSH CORPORATION) 31 August 2017 (31.08.2017), entire document, especially Figs. 1-2; paras [0020]-[0036]	1-18
A	US 2018/0022355 A1 (TOYOTA JIDOSHA KABUSHIKI KAISHA) 25 January 2018 (25.01.2018), entire document	1-18
A	US 2016/0347164 A1 (EFFICIENT DRIVETRAINS INC.) 1 December 2016 (01.12.2016), entire document	1-18
A	US 2008/0318727 A1 (MASUBARA et al.) 25 December 2008 (25.12.2008), entire document	1-18
A	US 2007/0093339 A1 (USORO) 26 April 2007 (26.04.2007), entire document	1-18
A	WO 2017/209790 A1 (TWO HEADS, LLC) 07 December 2017 (07.12.2017), entire document	1-18

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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