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Declarations under Rule 4.17:

- *as to the identity of the inventor (Rule 4.17(i))*
- *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))*
- *of inventorship (Rule 4.17(iv))*

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[Continued on next page]

(54) Title: CONTINUOUSLY VARIABLE TRANSMISSION HAVING A PERIODIC DISPLACEMENT WAVEFORM WITH A CONSTANT VELOCITY PORTION

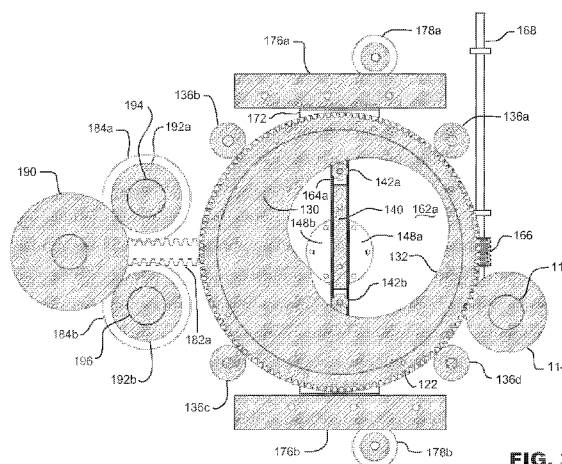


FIG. 3

(57) Abstract: A continuously variable transmission (CVT) can include a rotary cam member defining an internal cam surface operably engaged with a cam follower assembly for generating a displacement waveform with a constant velocity portion. A ratio control assembly can restrain the cam follower assembly for reciprocal linear movement and can scale the reciprocal linear movement between at least 0% and 100%, inclusive, in response to an angular orientation of the ratio control assembly. An output assembly can convert the scaled reciprocal linear movement into rotary movement of an output shaft. A CVT method can include generating a periodic displacement waveform with a constant velocity portion, scaling the periodic displacement waveform between at least 0% and 100%, inclusive, with a ratio plate, where the scaling is in response to an angular orientation of the ratio plate, and converting the reciprocal linear movement into rotary output with a cominer.





— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

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<p>A. CLASSIFICATION OF SUBJECT MATTER IPC(8) - F16H 29/20 (2014.01) CPC - F16H 29/20 (2014.07) According to International Patent Classification (IPC) or to both national classification and IPC</p>																	
<p>B. FIELDS SEARCHED</p> <p>Minimum documentation searched (classification system followed by classification symbols) IPC(8) - F16H 29/00, 29/20, 59/06, 61/66 (2014.01) CPC - F16H 29/00, 29/20, 59/06, 61/66 (2014.07)</p> <p>Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched USPC - 74/112, 116, 117, 120, 121, 122, 125</p> <p>Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) Orbit, Google Patents, Google</p>																	
<p>C. DOCUMENTS CONSIDERED TO BE RELEVANT</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:10%;">Category*</th> <th style="width:70%;">Citation of document, with indication, where appropriate, of the relevant passages</th> <th style="width:20%;">Relevant to claim No.</th> </tr> </thead> <tbody> <tr> <td>X</td> <td>US 5,603,240 A (KLOVSTAD et al) 18 February 1997 (18.02.1997) entire document</td> <td>1-3, 5, 9-14, 16, 18, 19, 20</td> </tr> <tr> <td>A</td> <td>US 2010/0294054 A1 (FLUGRAD et al) 25 November 2010 (25.11.2010) entire document</td> <td>1-20</td> </tr> <tr> <td>A</td> <td>US 3,466,822 A (POCATERRA) 07 March 1972 (07.03.1972) entire document</td> <td>1-20</td> </tr> <tr> <td>A</td> <td>US 2006/0199694 A1 (ROBERTS) 07 September 2006 (07.09.2006) entire document</td> <td>1-20</td> </tr> </tbody> </table>			Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	X	US 5,603,240 A (KLOVSTAD et al) 18 February 1997 (18.02.1997) entire document	1-3, 5, 9-14, 16, 18, 19, 20	A	US 2010/0294054 A1 (FLUGRAD et al) 25 November 2010 (25.11.2010) entire document	1-20	A	US 3,466,822 A (POCATERRA) 07 March 1972 (07.03.1972) entire document	1-20	A	US 2006/0199694 A1 (ROBERTS) 07 September 2006 (07.09.2006) entire document	1-20
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<p>Date of the actual completion of the international search</p> <p>02 September 2014</p>		<p>Date of mailing of the international search report</p> <p align="center">23 SEP 2014</p>															
<p>Name and mailing address of the ISA/US</p> <p>Mail Stop PCT, Attn: ISA/US, Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201</p>		<p>Authorized officer:</p> <p align="center">Blaine R. Copenheaver</p> <p>PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774</p>															