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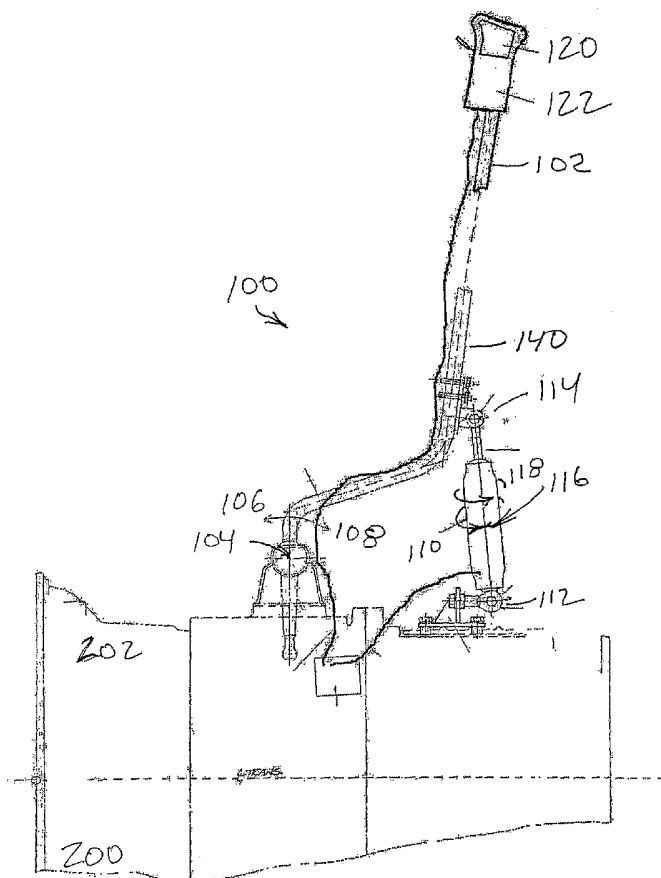
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[Continued on next page]

(54) Title: MAGNETIC FLUID SHIFTER DAMPER MECHANISM



(57) Abstract: A magnetic fluid shifter damper mechanism for a vehicle transmission may include a shift linkage having a first position and a second position, a magnetic fluid damper disposed between a substantially fixed point and a support point on the shift linkage, a fluid inside the magnetic fluid damper resisting substantially a motion of the support point relative to the substantially fixed point in the presence of a magnetic field, wherein the magnetic field is applied substantially to the fluid when the shift lever is in substantially the first or the second position, and wherein the magnetic field is removed substantially from the fluid when the shift lever is substantially between the first and the second position.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/28460

A. CLASSIFICATION OF SUBJECT MATTER

IPC: **B60K 20/00**(2006.01);**F16F 9/53**(2006.01)

USPC: 74/473.1,473.21,473.26,473.28,473.29,519,522.5,523;188/267,267.2,267.1

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)

U.S. : 74/473.1, 473.21, 473.26, 473.28, 473.29, 519, 522.5, 523; 188/267, 267.2, 267.1

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)
EAST

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,275,065 A (Ruiter) 01 January 1994 (01.01.1994), see entire document.	1-20
A	US 6,308,813 A (CARLSON) 30 OCTOBER 2001 (30.10.2001), SEE ENTIRE DOCUMENT.	1-20
A	US 5,921,142 A (PETER) 13 JULY 1999 (13.07.1999), SEE ENTIRE DOCUMENT.	1-20
A	US 5,974,856 A (ELIE ET AL.) 02 NOVEMBER 1999 (02.11.1999), SEE ENTIRE DOCUMENT.	1-20
A	US 5,182,964 A (GELLNER) 02 FEBRUARY 1993 (02.02.1993), SEE ENTIRE DOCUMENT.	1-20
A	US 4,955,935 (KATAYAMA) 11 SEPTEMBER 1990 (11.09.1990), SEE ENTIRE DOCUMENT.	1-20
A	US 4,916,966 A (WEISHAUP ET AL.) 17 APRIL 1990 (17.04.1990), SEE ENTIRE DOCUMENT.	1-20



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C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4,323,356 A (STEPHENSON) 06 APRIL 1982 (06.04.1982), SEE ENTIRE DOCUMENT.	1-20