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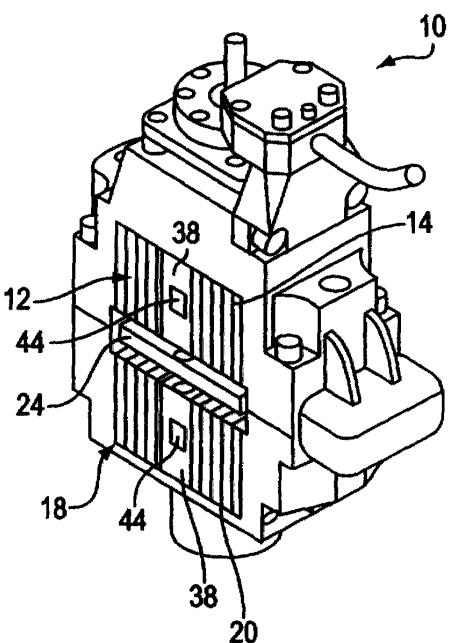
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(54) A method for controlling an armature of a high speed electromagnetic actuator

(57) A method is provided to control velocity of an armature of an electromagnetic actuator as the armature moves from a first position towards a second position. The electromagnetic actuator includes an electromagnet having a coil and a stator core at the second position. The method includes permitting the armature

to move towards the stator core. Magnetic flux in a magnetic circuit created by the armature and electromagnet is determined when the armature is moving toward the stator core. The determined magnetic flux is used as a feedback variable to control energy to the coil so as to control a velocity of the armature as the armature moves towards the stator core.

FIG. 1





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EUROPEAN SEARCH REPORT

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
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			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			H01F F01L
<p>The present search report has been drawn up for all claims</p>			
Place of search	Date of completion of the search		Examiner
THE HAGUE	2 October 2001		Durville, G
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document</p>			

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 00 10 3929

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