Sweden

(12) Patent specification (10) SE 538 562 C2

(21) Patent application number:	1451510-0	(51) Int.Cl.:	
(45) Grant of patent:	2016-09-20	***F16D 23/06***	(2006.01)
(41) Available to the public:	2016-06-11	***F15B 15/20***	(2006.01)
(22) Filing date:	2014-12-10	***F16H 61/04***	(2006.01)
(24) Effective date:	2014-12-10	***F16H 61/28***	(2006.01)
(30) Priority data:	---		

(73) Patentee: Scania CV AB, -, 151 87 Södertälje SE
(72) Inventor: Daniel HÄGGSTRÖM, Södertälje SE
Peer NORBERG, Södertälje SE
(74) Agent: BJERKÉNS PATENTBYRÅ KB, Box 5366, 102 49, Stockholm SE

(54) Title: An actuator for a synchronizing unit in a gearbox

(56) Cited documents: US 3818776 A

(57) Abstract:

The present invention relates an actuator for a synchronizing unit in a gearbox. The actuator (21) comprises a cylinder (30), a piston (31) movably arranged into an inner space of the cylinder (30) such that it divides the inner space into a first chamber (32) and a second chamber (33) and a piston rod (35) adapted to transmit movements from the piston (31), via a shift mechanism (15, 25), to the first component (16) of the synchronizing unit (14). The actuator (21) comprises a valve mechanism (36-42) configured to provide a restricted flow area and a restricted compressed medium flow from a compressed medium source (22) to the first chamber (32) during a displacement of the first component (16) from a neutral position to a synchronizing position and to provide a larger flow area and a larger compressed medium flow from the compressed medium source (22) to the first chamber (32) when the first component (16) has reached the synchronizing position.

