

Title (en)  
SLIP-CONTROLLED HYDRAULIC BRAKE SYSTEM WITH CHARGE PUMP

Title (de)  
SCHLUPFGEREGELTE HYDRAULISCHE BREMSANLAGE MIT LADEPUMPE

Title (fr)  
SYSTEME DE FREINAGE HYDRAULIQUE A REGULATION ANTIPATINAGE COMPORTANT UNE POMPE D'AMORCAGE

Publication  
**EP 0874748 A1 19981104 (DE)**

Application  
**EP 97901582 A 19970122**

Priority  
• DE 19603871 A 19960203  
• EP 9700285 W 19970122

Abstract (en)  
[origin: DE19603871A1] For pre-charging the self-priming return pumps (17) in a slip-controlled brake system, e.g. at low temperatures, the following arrangement is proposed: a charge pump (28) fitted between the reservoir (22) and master cylinder (1) pumps fluid via a return valve into a feed connection (23) of the master cylinder (1); the fluid reaches the inlet side of the return pumps (17) by reversing an electromagnetic reversing valve (19) and an electromagnetic divider valve (4). For normal braking, a connection is provided between the reservoir (22) and master cylinder (1) and has an on-off valve (27). The on-off valve (27) is hydraulically operated and is subjected to the pumping pressure of the charge pump (28) in the closure direction and to the pressure on the reservoir connection (23) in the opening direction.

IPC 1-7  
**B60T 8/48**

IPC 8 full level  
**B60T 8/24** (2006.01); **B60T 8/34** (2006.01); **B60T 8/48** (2006.01)

CPC (source: EP)  
**B60T 8/341** (2013.01); **B60T 8/4881** (2013.01)

Citation (search report)  
See references of WO 9728031A1

Designated contracting state (EPC)  
DE FR GB

DOCDB simple family (publication)  
**DE 19603871 A1 19970807**; EP 0874748 A1 19981104; JP 2000503933 A 20000404; WO 9728031 A1 19970807

DOCDB simple family (application)  
**DE 19603871 A 19960203**; EP 9700285 W 19970122; EP 97901582 A 19970122; JP 52727597 A 19970122