

Title (en)  
METHOD OF STARTING THE AUTOMATIC CONTROL OF THE OPERATING CURRENT OF A CURRENT SOURCE ON SWITCHING-ON THE CIRCUIT

Publication  
**EP 0462929 A3 19921014 (DE)**

Application  
**EP 91810439 A 19910611**

Priority  
DE 4019355 A 19900618

Abstract (en)  
[origin: EP0462929A2] To start the automatic control of the operating current of a current source when the circuit is switched on, it is proposed to control the current source by presetting the circuit parameters in such a manner that the current produced on switch-on of the circuit tends towards a preset nominal value. The current control is only brought into action when the difference between the actual value and the nominal value of the current drops below a particular limit value. For this purpose, a control device is used which exhibits a voltage controller (7), a current controller (8) and a switch-over device (9) with threshold circuit. The switch-over device (9) generates a switching signal (s) which effects the switching-over from the initial voltage control to the current control as soon as the current exceeds a particular threshold value after the switching-on of the circuit. This makes it possible effectively to avoid switching-on current surges even when the circuit exhibits a current source controlled with an intermittent adjusting effect, for example a current source controlled by phase-control of valves. This effect can be improved further by the current control initially coming into action with an impressed actual value corresponding to the nominal value of the operating current during switch-on. <IMAGE>

IPC 1-7  
**G05F 1/455**

IPC 8 full level  
**G05F 1/02** (2006.01); **B23K 9/073** (2006.01); **G05F 1/455** (2006.01); **G05F 1/569** (2006.01); **G05F 1/575** (2006.01); **H02M 7/155** (2006.01); **H05H 1/24** (2006.01); **H05H 1/36** (2006.01)

CPC (source: EP US)  
**G05F 1/569** (2013.01 - EP US); **G05F 1/575** (2013.01 - EP US); **H05H 1/36** (2013.01 - EP US)

Citation (search report)  
• [X] DE 3406251 A1 19840823 - MITSUBISHI ELECTRIC CORP [JP]  
• [AD] DE 2716332 A1 19781026 - PLASMAINVENT AG  
• [A] DE 3528750 A1 19860424 - VOEST ALPINE AG [AT]  
• [A] PATENT ABSTRACTS OF JAPAN vol. 9, no. 38 (M-358)(1761) 19. Februar 1985 & JP-A-59 179 268 ( MITSUBISHI DENKI K.K ) 11. Oktober 1984

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