

Title (en)  
SPEED CONTROLLING DEVICE IN MULTIPLE LOOP-CONTROLLED CONTINUOUS MILL TRAINS

Publication  
**EP 0056438 A3 19830831 (DE)**

Application  
**EP 81108724 A 19811022**

Priority  
DE 3101512 A 19810119

Abstract (en)  
[origin: EP0056438A2] 1. A device for regulating the speed in continuous mill trains, in which the rolling stock is divided into two or more sections and wherein each framework, through which one of the sections passes, is assigned a loop regulator whose output value is conducted to the speed regulator as a guide value to drive the assigned framework characterised in that the output of the loop regulator (15) assigned to the output framework (6, 11) is connected to a ramp-function generator (18) having storage properties, and a difference forming device (19) evaluates the difference between the guide value (W) of the output framework (6, 11) and the output value of the ramp-function generator (18), which is fed as an additional theoretical value ( $n \cdot z$ ) to the speed regulators (14) of the frameworks (2 to 6 and 7 to 11) through which the individual sections (I and II) pass, where the guide value (W) of the output framework (6, 11) is fed to the difference forming device (19) directly, and is fed to the ramp-function generator (18) via a switch (17) which is closed from the entry of the sections (I and II) into the output framework (6, 11) until the emergence of the end of the section from the last framework (1) common to all the sections.

IPC 1-7  
**G05D 13/64**; **B21B 37/04**

IPC 8 full level  
**B21B 37/50** (2006.01); **G05D 13/64** (2006.01); **B21B 1/18** (2006.01); **B21B 13/00** (2006.01)

CPC (source: EP)  
**B21B 37/50** (2013.01); **B21B 1/18** (2013.01); **B21B 2013/006** (2013.01)

Citation (search report)  
• [A] DE 1109121 C  
• [AD] SIEMENS-ZEITSCHRIFT; Nr. 47, 1973, Beiheft "Antriebstechnik und Prozeß-automatisierung in Hütten- und Walzwerken"; P. WALGENBACH "Elektrische Ausrüstung an Feinstahl- und Drahtstraßen", Seiten 115-119  
• [A] BROWN BOVERI MITTEILUNG Nr. 2/3, 1972, H. WALKNER "Digitale Sollwertvorgabe, Schlingenregelung und Folgesteuerung bei kontinuierlichen Walzstraßen" Seiten 109-112

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