

Title (en)

Device for regulating the balancing system of an artillery piece depending on the external temperature

Title (de)

Vorrichtung zur Regelung des Balanciersystems eines Artilleriegeschützes in Abhängigkeit von der Aussentemperatur

Title (fr)

Dispositif de réglage en fonction de la température extérieure d'un système d'équilibrage d'une pièce d'artillerie

Publication

EP 0702202 A1 19960320 (FR)

Application

EP 95401972 A 19950830

Priority

FR 9411121 A 19940919

Abstract (en)

The regulator connects the carriage (2) to a pivoted weight (3) and comprises a gas chamber (6) which exerts a force (Fe) opposite to that (Fp) of the weight. The chamber (6) cooperates with a moving piston (7) as the weight pivots through an angle relative to the carriage, so that the pressure of the gas in the chamber varies as a function of the angular displacement. The volume of the gas in the chamber is calculated so that at a given pressure it exerts a force which is equal and opposite to the force exerted by the pivoted weight. The regulator also has a mechanical system for modifying the gas pressure inside the chamber for other temperatures, and a second mechanical system for modifying the speed of variation of the gas volume during the angular movement of the pivoted weight.

Abstract (fr)

Le système d'équilibrage relie l'affût (2) de la pièce d'artillerie et la masse pivotante (3). Il comprend une chambre à gaz (6) dont la pression exerce une force (Fe) opposée à la force (Fp) exercée par la masse pivotante (3). Le système comprend deux moyens de réglage mécaniques pour modifier le volume du gaz de la chambre (6) pour tenir compte des variations de température et pour modifier la vitesse de variation du volume de gaz pour tenir compte des différents angles de pointage en hauteur. <IMAGE>

IPC 1-7

F41A 27/30

IPC 8 full level

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CPC (source: EP US)

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Citation (applicant)

EP 0309646 A2 19890405 - RHEINMETALL GMBH [DE]

Citation (search report)

- [Y] US 1858829 A 19320517 - JOYCE BRYAN P
- [Y] US 1460419 A 19230703 - JOYCE BRYAN P
- [AD] EP 0309646 A2 19890405 - RHEINMETALL GMBH [DE]
- [A] US 3033085 A 19620508 - WITKIN DONALD E

Cited by

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EP 0702202 A1 19960320; FR 2724715 A1 19960322; FR 2724715 B1 19961227; US 5663521 A 19970902

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