

Title (en)

Vibration frequency setting mechanism of an engraving device provided with air pen.

Title (de)

Schwingungsfrequenzeinstellvorrichtung für eine mit einem pneumatisch angetriebenen Gravierstift versehene Graviervorrichtung.

Title (fr)

Mécanisme de réglage de la fréquence d'une machine de gravure ayant un outil de gravure entraîné pneumatiquement.

Publication

EP 0402754 A2 19901219 (EN)

Application

EP 90110707 A 19900606

Priority

JP 15407589 A 19890616

Abstract (en)

There is disclosed a vibration frequency setting mechanism of an engraving device provided with air pen. The vibration frequency setting mechanism comprises an engraving device provided with an air pen (11) vibration frequency of which is varied in response to compressed air to be supplied to the holder (12), a vibration frequency detector (12) for detecting the vibration frequency of the air pen (11) and providing a pulse signal (21) corresponding to the vibration frequency, a counter (4) for counting the pulse signal (21), a pressure regulator (1) provided with a regulating terminal (2), a vibration frequency setting circuit (5) for setting the vibration frequency (22) of the air pen(11), a comparator (6) for receiving the output of the counter (4) and the vibration frequency (22) and providing a logical "1" if the output of the counter (4) is greater than the vibration frequency (22) and a logical "0" if the output of the counter (4) is less than the vibration frequency (22), an output circuit (7) for receiving the output of the comparator (6) and decrementing the analog output at a given step if the output of the comparator (6) is a logical "1" and incrementing the analog output at a given step if the output of the comparator (6) is a logical "0", whereby the analog output of the output circuit (7) is supplied to the regulating terminal (2) so that the compressed air is supplied to the holder (12).

IPC 1-7

B44B 3/00

IPC 8 full level

B44B 11/00 (2006.01); **B44B 3/00** (2006.01)

CPC (source: EP KR)

B44B 3/00 (2013.01 - KR); **B44B 3/005** (2013.01 - EP)

Cited by

EP1106387A3; DE10210630B4; DE102017128475A1; DE102017128475B4; DE102006022166B4; DE102006022166A1

Designated contracting state (EPC)

DE GB IT

DOCDB simple family (publication)

EP 0402754 A2 19901219; EP 0402754 A3 19910710; CA 2018906 A1 19901216; JP H0319900 A 19910129; JP H0780396 B2 19950830; KR 910000393 A 19910129; KR 950012966 B1 19951024

DOCDB simple family (application)

EP 90110707 A 19900606; CA 2018906 A 19900613; JP 15407589 A 19890616; KR 900008762 A 19900614