Title (en)

ICE SKATE SHARPENING MACHINE

Publication

EP 0128430 B1 19880817 (EN)

Application

EP 84105970 A 19840525

Priority

- CA 430108 A 19830610
- CA 430117 A 19830610

Abstract (en)

[origin: EP0128430A2] A machine for sharpening the blade of an ice skate (8) has a vertically mounted, thin grinding wheel (409) with a convex transverse cross-section corresponding to the concave transverse cross-section desired for the blade edge. Clamping plates on a cradle (10) hold the blade above the wheel with their central planes coplanar and with the wheel biassed against the blade. The cradle (10) is pivotable about a horizontal axis (901) above the skate so that the skate can be swung in an arc. Hence the movement of the blade over the wheel takes place in an arc that is curved in the same direction as the convex profile of the blade edge. This action reduces the problem of unevenness of depth of cut along the length of the blade, that has been experienced with prior machines employing straight line relative travel between the skate and the wheel. The tendency for the wheel to take a deeper cut at the more sharply curved toe and heel portions of the blade can be further compensated for by increasing the speed of traverse of the blade over the wheel in the vicinities of these end portions. This traversing speed can be reduced incrementally from a maximum at the extreme toe end of the blade down to a minimum over the central portion of the blade, while being increased again incrementally as the wheel approaches the heel end. Provision is also made for stopping the motor that drives the grinding wheel when the wheel is in the area of the picks of a figure skate.

IPC 1-7

A63C 3/10; B24B 9/04

IPC 8 full level

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CPC (source: EP)

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Cited by

WO8900443A1; US11806826B2; US11878386B2; WO2021050351A1; WO2021050349A1

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