

Title (en)
LOG CUTTING PROCEDURES

Title (de)
VERFAHREN ZUM ZERLEGEN VON HOLZBLÖCKEN

Title (fr)
PROCEDES DE COUPE DE BILLES

Publication
EP 1159610 A4 20030115 (EN)

Application
EP 99940745 A 19990817

Priority
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Abstract (en)
[origin: WO0036413A1] The present invention relates to the use of a single end testing of stems of felled trees whereby by inducing a sonic wave with an impact and by reference to detected reflections and with a knowledge of the length of the stem the stiffness and/or strength characteristics of the stem or logs to be cut therefrom can be derived. A preferred procedure is a determination of the fundamental frequency f_0 which relates to velocity V , the speed of longitudinal compressional motions along the stem, and L , the length of the stem, as follows: $V=2Lf_0$. From that value V or a function of V can be derived an indicator of stiffness and/or strength. For example the modulus of elasticity (MOE) is such an indicator and can be determined by the equation $MOE=\rho V^2$ where ρ is density. For green felled timber ρ can be estimated as approximating 1000 kg/m³.

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Citation (search report)
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• [A] US 5307679 A 19940503 - ROSS ROBERT J [US]
• [A] EP 0403020 A2 19901219 - UNIV WASHINGTON [US]
• [A] PATENT ABSTRACTS OF JAPAN vol. 1995, no. 08 29 September 1995 (1995-09-29)
• See references of WO 0036413A1

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