

Title (en)  
TOOL-CHANGING DEVICE

Title (de)  
WERKZEUGWECHSELVORRICHTUNG

Title (fr)  
DISPOSITIF DE CHANGEMENT D'OUTIL

Publication  
**EP 1126947 A1 20010829 (DE)**

Application  
**EP 99947281 A 19990907**

Priority  
• DE 19851264 A 19981106  
• EP 9906574 W 19990907

Abstract (en)  
[origin: DE19851264A1] The invention relates to a tool-changing device, especially for single or multi-spindle machine tools, and to a method for carrying out a tool change in a NC machining centre with one or more spindles. To this end, the tool-changing device has a main storage element (2) for receiving a plurality of machining tools (I-VI), at least one intermediate storage element (3) and at least one transfer device (4) for transporting the machining tools between said main storage element (2) and said intermediate storage element (3). The intermediate storage element (3) has at least one transfer position for transferring a tool between the intermediate storage element (3) and the respective spindle (5, 6) of the machine tool.

IPC 1-7  
**B23Q 3/155**

IPC 8 full level  
**B23Q 3/155** (2006.01); **B23Q 3/157** (2006.01)

CPC (source: EP US)  
**B23Q 3/15539** (2016.10 - EP US); **B23Q 3/1554** (2013.01 - EP US); **B23Q 3/15773** (2013.01 - EP); **B23Q 2003/15537** (2016.10 - EP US); **B23Q 2003/155407** (2016.10 - EP US)

Citation (search report)  
See references of WO 0027583A1

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)  
**DE 19851264 A1 20000518**; EP 1126947 A1 20010829; WO 0027583 A1 20000518

DOCDB simple family (application)  
**DE 19851264 A 19981106**; EP 9906574 W 19990907; EP 99947281 A 19990907