

[SS 8] ..fi epodoc



Database: EPODOC

[EPODOC: SS 8] sand 1w paper

Results in EPODOC 1.635

[SS 9] emery 1w paper

Results in EPODOC 279

[SS 10] cutter and paper

Results in EPODOC 13.956

[SS 11] (8 or 9) and 10

Results in EPODOC 27

[SS 12] diamond 1w disc

Results in EPODOC 272

[SS 13] 11 and 12

Results in EPODOC 0

[SS 14] abrasive 1w disc

Results in EPODOC 1.625

[SS 15] 11 and 15

Non-existent or invalid SS number(s).

- Check with the command ..HI. When searching for numbers, use quotes e.g. "4" W WHEEL? *ERROR*
(-100803)

[SS 15] 11 and 14

Results in EPODOC 0

[SS 16] 11

[SS 17] ..li



1/27 © EPODOC / EPO

PN - [CN105269422](#) A 20160127
 PR - CN20141270316 20140618
 AP - CN20141270316 20140618
 DT - I
 PA - SHANGHAI BEIQI INFORMATION TECHNOLOGY CO LTD
 TI - Novel **sand paper** sander
 AB - The invention discloses a novel **sand paper** sander, and belongs to the polishing tool field; the novel **sand paper** sander comprises a **sand paper** holder (1), a reel (2) in the **sand paper** holder, and a handle (3); the reel is arranged in the **sand paper** holder (1), and provided with an upper opening; in usage, a rolled **sand paper** roll is arranged on a roller (23) in the reel; the left side face (13) and right side face (14) of the **sand paper** holder (1) are respectively provided with a first clamp (11) and a second clamp (12), thus fixing the **sand paper** on the **sand paper** holder (1); the second clamp is provided with a **cutter**. New **sand paper** can be directly drawn from the reel (2), and waste **sand paper** can be drawn from the second clamp (12) and cut off; the novel **sand paper** sander is simple and convenient.

2/27 © EPODOC / EPO

PN - [CN105077528](#) A 20151125
 PR - CN20151495504 20150813
 AP - CN20151495504 20150813
 DT - I
 PA - UNIV SHANDONG JIANZHU
 TI - Castanea mollissima peeling machine
 AB - The invention relates to a castanea mollissima peeling machine, and belongs to the field of agricultural machines. The castanea mollissima peeling machine is composed of a stirring mechanism, a transmission peel grinding mechanism, a steel structure support and a motor. The stirring mechanism is composed of a feeding box, a feeding bin hopper, a milling **cutter**, a milling **cutter** spindle, a belt wheel, a belt and a motor, and used for roughly peeling castanea mollissima. The transmission peel grinding mechanism is composed of an upper conveying belt, a lower conveying belt, **sand paper**, a transmission shaft, a belt wheel, a belt and a motor, and used for finely peeling the castanea mollissima. The castanea mollissima peeling machine has the advantages of being easy to operate and good in peeling efficiency and achieving double peeling functions.

3/27 © EPODOC / EPO

PN - [CN203293324U](#) U 20131120
 PR - CN20132324861U 20130528
 AP - CN20132324861U 20130528

DT - I

PA - CIXI KUANGYAN YINGXING BAMBOO PRODUCTS FACTORY

TI - Burr-free safe type bamboo cutting machine

AB - The utility model relates to the field of forest tree processing machinery, in particular to a bamboo cutting machine. The burr-free safe type bamboo cutting machine comprises a machine frame, a motor, a **cutter** holder, a **cutter** disk, a blade and a top barrel, wherein a guide rail is arranged on an upper end face of the machine frame, the **cutter** holder is fixedly installed at the front end of the machine frame, the top barrel is arranged on the guide rail, the motor is fixedly installed at the bottom of the machine frame, the motor can drive the top barrel to slide front and back on the guide rail through a transmission mechanism, the blade is arranged in the **cutter** disk, a **cutter** opening faces towards the top barrel, and **sand paper** is adhered to the two sides of the blade. The **sand paper** is arranged on the lateral sides of the blade, so that when the blade cuts bamboo tubes, the **sand paper** can polish burrs and sharp edges meanwhile. Thus, a follow-up operator is prevented from being cut by bamboo canes. The burr-free safe type bamboo cutting machine has good applicability.

4/27 © EPODOC / EPO

PN - [CN103033403](#) A 20130410

PNFP - CN103033403B B 20150902

PR - CN20111303133 20110929

AP - CN20111303133 20110929

DT - I

CT - || STSE (A)
[CN201225969Y](#) Y 20090422 [A] (UNIV BEIJING SCIENCE & TECH [CN])
 [A]
[CN1129981](#) A 19960828 [Y] (NORSK HYDRO AS [NO])
 [Y]
[KR100380844B](#) B1 20030418 [A]
 [A]
[CN101738340](#) A 20100616 [A] (BEIJING NONFERROUS METAL)
 [A]
[US2003027505](#) A1 20030206 [A] (WITHERS BRADLEY S [US], et al)
 [A]
[CN102672549](#) A 20120919 [A] (UNIV LIAONING SCI & TECH)
 [A]

CTNP - || STSE (A)
 [] 徐刚等,
 "RPV模拟钢中纳米富Cu相的析出和结构演化研究", <<金属学报>>, (20110731), vol. 47, no. 7
 [] 周曦亚等,
 "无机材料显微结构分析", <<化学工业出版社>>, (20070331)

PA - (A)
 ANGANG STEEL CO LTD

TI - (A)
 Preparation method of thin-sheet metal film test sample

AB

- (A)

The invention discloses a preparation method of a thin-sheet metal film test sample. The preparation method comprises the following specific steps of: pre-thinning mechanically: holding one end of a thin-sheet test sample with a hand, and grinding the other end of the test sample to (0.5 ± 0.1) millimeters by using a grinding machine for grinding a metallic phase test sample; pre-thinning chemically: placing one end, which is ground by a grinding wheel, of the test sample into a corrosion solution $\text{HCl}:\text{HNO}_3:\text{H}_2\text{O}$ of which the volume ratio is 3:1:(0-12) for corroding to finally thin the test sample to (0.3 ± 0.1) millimeters; thinning with **sand paper**: placing the **sand paper** onto a glass sheet, shearing a piece of test sample from the chemically-thinned test sample by using scissors, holding a grinding block with a hand, pressing the test sample, and driving the test sample to grind in a reciprocating way on the **sand paper**; and cutting the test sample into circular sheets by using a sample **cutter**, and punching the test sample by using a dual jet electrolysis apparatus or an ion thinning instrument for thinning. Due to the adoption of the method, the problems of difficulty in preparing a thin-sheet test sample, low sample preparation efficiency, incapability of reflecting the real situation of metal tissues due to the presence of an interference layer on the surface of the test sample, and the like are solved.

5/27 © EPODOC / EPO

PN - [CN202517497U](#) U 20121107

PR - CN20122139907U 20120326

AP - CN20122139907U 20120326

DT - I

PA - GUOZHU LIANG

TI - **Cutter** structure

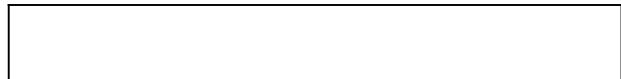
AB - The utility model discloses a **cutter** structure. The **cutter** structure comprises a handle and a blade, wherein a slot is arranged on the handle; a column-shaped body capable of rotating inside the slot is arranged in the slot; a through hole is formed in the handle so as to accommodate a spring and a firestone; the direction of the through hole is opposite to the section of the column-shaped body in the slot; the firestone is in contact with a **sand paper** or a pointed projection, which is arranged on the section of the column-shaped body, under an effect of the spring so as to ensure that the firestone is in friction with the **sand paper** or



the pointed projection in a column-shaped body rotating state to generate sparks so as to make fires outdoors; the **cutter** structure disclosed by the utility model has the advantages of compact structure and skillful design; meanwhile, as the interior of the column-shaped body is a hollow structure, a cover plate, which can be opened in a push-and-pull way, is arranged on the column-shaped body, so that small emergency articles or small outdoor rescue articles are placed in the interior hollow structure of the column-shaped body so as to obtain a multifunctional **cutter**; moreover, as an integral **cutter** is arranged in a shape of a fiveshooter; and the **cutter** structure disclosed by the utility model has the advantages of good decorative effect, integral beautiful appearance and great convenience and practicability and is suitable for being popularized.

6/27 © EPODOC / EPO

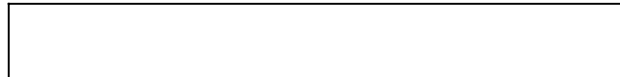
PN - [CN202242506U](#) U 20120530
 PR - CN20112330750U 20110810
 AP - CN20112330750U 20110810
 DT - I
 PA - QIXUAN WANG
 TI - Novel pencil
 AB - The utility model relates to a novel pencil, which comprises a pencil body (1) and a pencil lead (2), wherein the pencil body (1) is provided with a pencil cap (3); the pencil cap (3) is a section of circular pipe buckled on the pen body (1); a circle of **sand paper** (4) is embedded into the inner side wall of the top end of the



pencil cap (3); and one side of the outer surface of the pencil cap (3) is provided with a pencil clamp (5). The pencil is provided with the pencil cap, the inner side of the top end of the pencil cap is provided with **sand paper**, the pencil cap can be used for protecting the pencil lead, and the **sand paper** can be used for grinding a lead core, so that lead is prevented from being broken easily after the pencil is collided, and the pencil lead can be prevented from polluting other articles; meanwhile, the pencil lead can be ground conveniently and quickly through the **sand paper**, so that the phenomenon of accidental damage to fingers caused by cutting of the pencil lead with a **cutter** is avoided; and the pencil is particularly suitable for children.

7/27 © EPODOC / EPO

PN - [CN102248225](#) A 20111123
 PNFP - CN102248225B B 20120912
 PR - CN20111175983 20110628
 AP - CN20111175983 20110628
 DT - I
 CT - || STSE (A)
[CN1827276](#) A 20060906 [
] (CHANGAN AUTOMOBILE
 GROUP [CN]);
[CN200988120Y](#) Y 20071212 [
] (WEIPING ZHENG [CN]);
[CN201329454Y](#) Y 20091021 [
] (EBARA GREAT PUMPS CO LTD
 [CN]);
[CN201455454U](#) U 20100512 [
] (TIANJIN PUMPS & MACHINERY
 GROUP CO LTD);
[US5102221](#) A 19920407 [
] (SNECMA [FR]);
[TWM303078U](#) U 20061221 [
] (JANG BI-SHENG [TW])



PA	- (A B) HENGYANGSINOSTEEL HENGZHONG EQUIPMENT CO LTD
TI	- (A B) Small-bore chamfering tool
AB	- (A B) The invention discloses a small-bore chamfering tool with convenience in operation and high quality and efficiency in chamfering and burr removal. The small-bore chamfering tool comprises a cutter bar, a support sleeve, a wedge block, an adjusting screw, a cutting blade, a rivet and a set screw, wherein the hardness of the cutting blade is greatly higher than that of sand paper , so that the cutting blade can remove hard burrs at the juncture between a small hole and a large hole; the rivet and a pin hole of the cutter bar are in clearance fit, the cutter bar can be rotated around the rivet, the wedge block compresses the cutter bar downwards when the adjusting screw is rotated, thus enabling the cutter bar to swing along the axial line of the support sleeve and finally keep at a certain working angle, so that the cutting blade is in contact with a working surface better; when the cutter bar swings along the axial line of the support sleeve at a larger angle, burrs in a hole with a larger diameter can be eliminated; and when larger torque is needed, a torque increasing bar can be installed at the outer upper part of the support sleeve to increase the cutting force of the cutting blade.

PN	- CN202037419U U 20111116	
PR	- CN20112117539U 20110420	
AP	- CN20112117539U 20110420	
DT	- I	
PA	- ZHEJIANG JIRUN AUTOMOBILE CO; ZHEJIANG GEELY AUTOMOBILE CO; ZHEJIANG GEELY INT CORP	
TI	- Welding spot burr trimming tool	
AB	- The utility model discloses a welding spot burr trimming tool, which comprises an arc-shaped sand paper supporting plate, a handle fixing plate and a handle, wherein both ends of the handle fixing plate are fixed in the arc-shaped sand paper supporting plate, the handle is fixed on the handle fixing plate, an outer layer of the arc-shaped sand paper supporting plate is pasted with sand paper, the end surfaces of both ends of the arc-shaped sand paper supporting plate are inwards inclined, and outer cutter blades are fixed on the end surfaces. The welding spot burr trimming tool has the advantages that welding spot burrs generated in the electric welding can be efficiently and thoroughly removed, the structure is simple, the use is convenient, the defects of high work intensity, low efficiency and halfway removal in a traditional burr removal process are overcome, and high economic benefits are realized.	

9/27 © EPODOC / EPO

PN	- CN101697261 A 20100421	
PNFP	- CN101697261B B 20110720	
PR	- CN2009166256 20091026	
AP	- CN2009166256 20091026	
DT	- I	
PA	- (A)	

XINYANG POWER SUPPLY
COMPANY O

- (B)
XINYANG POWER SUPPLY CO
HENAN ELECTRIC POWER CO

TI

- (A B)
Producing process of number
plate of electric equipment

AB

- (A B)
The invention provides a
producing process of a number
plate of electric equipment,
which comprises the following
steps: cutting an aluminum plate
body of standard specification,
and polishing the front face of
the aluminum plate body
with **sand paper**; spraying a layer
of aluminum alloy priming paint
on the front face of the
aluminum plate body; spraying a
layer of silvery reflectorized
paint on the aluminum alloy
priming paint; spraying a layer
of varnish on the silvery
reflectorized paint to form a
varnish layer; sending the
aluminum plate body to a baking
finish house for baking;
arranging an information mark
layer on the varnish layer of the
aluminum plate body which is
qualified by baking; cleaning the
information mark layer, and
forming a transparent protection
layer on the information mark
layer with prepared epoxy
colourless methy lsilica gel by
adopting a plastic drop process;
air drying the aluminum plate
body under natural state; and
clearing raw edges of the
aluminum plate body with
a **cutter** to obtain a finished
product. The process has precise
design and simple process, is
suitable to change laggard
production technology of

number plates and is beneficial to improving the practicability of the product.

10/27 © EPODOC / EPO

PN - [KR20040075397](#) A 20040830
PR - KR20030010857 20030220
AP - KR20030010857 20030220
DT - I
CNOI - [G01N1/28](#)
PA - YU HYO SUN
TI - MANUFACTURE TECHNIQUE OF
MINIATURIZED SHEAR-PUNCH
SPECIMEN FOR SOLDER JOINT
AB - PURPOSE: A manufacture
technique of a miniaturized
shear-punch specimen for a
solder joint is provided to allow
micro-reliability estimation such
as sheer strength and sheer
strength with respect to a solder
joint of electronic parts and to
prevent moment from occurring
when modifying a shear.
CONSTITUTION: Given specimens
are manufactured as a block
with a size of 12*12*1.5 mm(1).
After the center of a surface
having a size of 12*12-t mm is
marked, a hole is perforated by
using a drill(2). An inner
peripheral surface of the block
subject to a process using a drill
is polished by means of
an **emery paper**(3). The block
having an inner peripheral
surface subject to a polishing
process is cut by means of a
wheel **cutter** so that a thin plate
specimen having a size of
12*12*12-t mm is manufactured
(4).



11/27 © EPODOC / EPO

PN - [KR20020033135](#) A 20020504
PR - KR20020017913 20020402



AP - KR20020017913 20020402

DT - I

CNOI - [B43L23/06](#)

PA - CHO HO GYUN [KR]

TI - PENCIL SHARPENER FOR CHILDREN AND ARTISTS

AB - PURPOSE: A pencil sharpener for children and artists is provided to allow a user to freely cut a pencil into a desired shape, and to prevent the user from being damaged during cutting.
 CONSTITUTION: The pencil sharpener for children and artists consists of three bodies (1,2,3) having a spiral tubular portion(6) and an inner spiral portion respectively so as to allow the three bodies to be coupled into various manners. The first body is made of a transparent material, and provided with a **sand paper**(4). The second body is made of a transparent material, and provided with an inner rubber membrane(5) and a conical **cutter**(7) or a trapezoid **cutter**(7A). The third body serves to temporarily store wastes generated during cutting of the pencil.

12/27 © EPODOC / EPO

PN - [JP2003071315](#) A 20030311

PNFP - JP3696535B B2 20050921

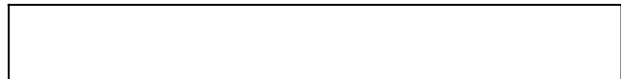
PR - JP20010261086 20010830

AP - JP20010261086 20010830

DT - I

CCA - [Y02E50/14](#)

FI - B01J20/20&A; B01J20/30;
 B02C18/06&Z; B02C19/10&B;
 B02C19/20&Z; B02C21/00&D;
 B65G53/24; B65G65/40&B;
 C01B31/02&101B; C01B32/05;
 C10B53/02

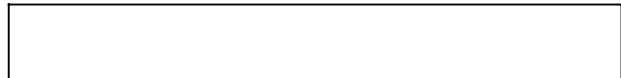


FT	- 3F047/BA01; 3F047/CA02; 3F047/CA10; 3F047/DA00; 3F047/DB00; 3F075/AA08; 3F075/BA01; 3F075/BB01; 3F075/CA03; 3F075/CA06; 3F075/CA09; 3F075/CC15; 3F075/CC29; 3F075/CD10; 4D065/CA05; 4D065/EB20; 4D065/ED14; 4D065/ED27; 4D067/CF06; 4D067/CF15; 4D067/CF20; 4D067/DD02; 4D067/DD04; 4D067/DD08; 4D067/DD11; 4D067/DD12; 4D067/DD17; 4D067/EE07; 4D067/EE13; 4D067/EE17; 4D067/EE32; 4D067/EE48; 4D067/GA20; 4D067/GB03; 4D067/GB07; 4G046/CA00; 4G046/CB02; 4G046/CC01; 4G046/CC10; 4G066/AA04B; 4G066/AC07A; 4G066/CA29; 4G066/CA51; 4G066/CA52; 4G066/DA03; 4G066/FA23; 4G146/AA01; 4G146/AB01; 4G146/BA31; 4G146/BA32; 4G146/BA43; 4G146/BB02; 4G146/BB03; 4G146/BB07; 4G146/BC03; 4G146/DA02; 4G146/DA07; 4G146/DA22; 4G146/DA28; 4G146/DA30; 4G146/DA42; 4G146/DA45; 4G146/DA47; 4H012/JA00; 4H012/JA13
PA	- (A) - KANKYO KOGAKU KK; KANKYO - KOGAKU KENKYUSHO KK
TI	- (A) - METHOD AND DEVICE FOR - MANUFACTURING BAMBOO - POWDER, METHOD AND DEVICE - FOR MANUFACTURING DRY- - DISTILLED BAMBOO POWDER - AND DRY DISTILLATION - COMPONENT
AB	- (A) - PROBLEM TO BE SOLVED: To - separately and efficiently obtain - powder of a skin part and a

xylem of a trunk material of bamboo. SOLUTION: A surface of the trunk material 1 of the bamboo which is air dried and is cut to prescribed length in advance is ground by a **sand paper** 12 to obtain powder of the skin part 1A. The trunk material 2 of the bamboo from which the skin is removed, is processed by a **cutter** device 20 to planar bamboo materials 3 which are divided to a plurality of parts at nearly equal internals in a peripheral direction. The planar bamboo material 3 is crushed by a first crusher 30, a second crusher 40 and a third crusher 50 finally to powder 6 of about 0.7 mm by precession action utilizing a second screen plate 51 from a first chip pieces 4 of about 5 mm square, for example, via finner second chip pieces 5 of about 2 mm square obtained by precession action utilizing a first screen plate 41. The bamboo material introduced in the first crusher 30 is automatically transported to a hopper 60 finally in a state of the powder 6 by utilizing a suction device 70.

13/27 © EPODOC / EPO

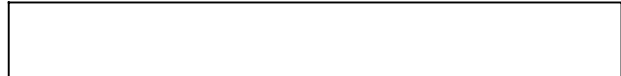
PN - [JPH06209819](#) A 19940802
 PR - JP19920193270 19920626
 AP - JP19920193270 19920626
 DT - I
 FI - A45D29/04
 PA - FUJIMURA AKIHIRO
 TI - NAIL POLISHER
 AB - PURPOSE:To polish the cut end of the nail to an arc shape by using sandpaper which has the arc shape and is stuck to grooves provided in a stationary plate.



CONSTITUTION: A user holds the right and left edges of the stationary plate 1 with the thumb and forefinger, etc., of his one hand, places the nail of one finger of the opposite hand already cut by a nail **cutter** or scissors to a **sand paper** 2 and polishes the nail by moving the finger up and down. The user places the nail on the upper side of a larger radius of curvature if the size of the finger is larger and on the lower side of a smaller radius of curvature if the size is smaller at this time. The edge of the nail is formed a beautiful curve when the user moves the furrier vertically. The nail is polished to a glossy state if the nail is placed on the sandpaper 3 of finer grains and is similarly polished after the end of polishing with the sandpaper 2 of coarser grains. Urethane foam layers are stuck to the rear surfaces of the sandpaper 2, 3 and snugly fit to the curvature at the edge of the nail. These layers are helpful for rounding the edge of the nail by eliminating the angles at its front and rear surfaces. The generated debris of the nail falls and accumulates into a debris box 6 from an aperture 7. This box 6 is disengageable and the powder in the box is discarded into a dustbin.

14/27 © EPODOC / EPO

PN - [JPS6347071](#) A 19880227
PNFP - JPH07100305B B2 19951101
PR - JP19860186078 19860807
AP - JP19860186078 19860807
DT - I
FI - B24D13/06



FT - 3C063/AA06; 3C063/AA07;
3C063/AB03; 3C063/BA12;
3C063/BA14; 3C063/BE02;
3C063/BE16; 3C063/BE20;
3C063/BG10; 3C063/BH18;
3C063/BH19; 3C063/BH22;
3C063/DD10; 3C063/FF30

PA - (A)
YAMAHA MOTOR CO LTD

TI - (A)
POLISHING DEVICE

AB - (A)
PURPOSE:To enable the
continuous grinding of good
quality by providing a **cutter** in a
direction opposite to the
rotation of a **sand paper** wheel at
a predetermined distance from
the center of the rotation of said
wheel in a grinding device fitted
with a **sand paper** feed
mechanism. CONSTITUTION:
A **sand paper** wheel 4 has a
plurality of **sand paper** 3 arrayed
in a radial direction together
with a backup brush 6, retains
each **sand paper** as 3 wound and
gradually feeds the **sand paper** 3,
detecting a change in angular
velocity with grinding work. The
leading edge of the **sand paper** 3
as fed is cut to an approximately
constant length with the cutting
edge 9a of a **cutter** 9 formed in
approximate L-shape at a
predetermined distance from the
front wall 1d of a housing 1 and
fitted in a direction opposite to
the advance direction of the **sand**
paper 3. According to the
aforesaid constitution, the
grinding of good quality can be
carried out continuously without
any interruption.

15/27 © EPODOC / EPO

PN - [JPH11329100](#) A 19991130

PR - JP19980135479 19980518



AP - JP19980135479 19980518

DT - I

FI - H01B9/02&B

PA - FUJIKURA LTD

TI - COMPACT POWER CABLE

AB - PROBLEM TO BE SOLVED: To provide a compact power cable having an external semiconductor layer which can be easily stripped from an insulating material by using a specialized tool when processing a terminal of the external semiconductor layer of bundled cores or a single core cable, and requiring no glass **cutter** or **sand paper cutter**. SOLUTION: This compact CV cable is structured by bundling plural cores 18 in each of which an internal semiconductor layer 10, an insulating material 14, an external semiconductor layer 16 and a shield 17 comprising a copper tape are provided in this order on the outer periphery of a center conductor 10, the internal semiconductor layer 12, the insulating layer 14 and the external semiconductor layer 16 in each core 18 are formed by simultaneously extruding the three layers, and the external semiconductor layer 16 is formed into a free stripping shape. A specialized tool 22 is to cut plural notches 24 in the external semiconductor layer 16 along the periphery of the core 18 of the compact CV cable and the longitudinal direction of the cable with a cutting blade 22 pierced into the semiconductor layer 16 for a fixed depth.

PN	- JPH0417983 A 19920122
PR	- JP19900123348 19900514
AP	- JP19900123348 19900514
DT	- I
FI	- B23K11/30&350; B24B19/00&Z
FT	- 3C049/AA04; 3C049/AA14; 3C049/AA16; 3C049/AA18; 3C049/AB03; 3C049/AB04; 3C049/CA01; 3C049/CA02; 3C049/CB01; 3C049/CB02; 3C049/CB04; 3C049/CB06
PA	- TOYOTA MOTOR CORP
TI	- DRESSING TOOL FOR ELECTRODE CHIP
AB	- PURPOSE:To easily restore a normal chip shape without generating the unworked remainder by providing a chip cutter and a polishing seat respectively on both surfaces of a cutter case and arranging a holding member at the polishing seat side eccentrically with respect to the cutter case. CONSTITUTION:When the cutter case 5 is rotated by a motor, the chip cutter 1 is rotated and the tip of the electrode chip 2 is ground. At this time, an unground part remains in a projecting shape on the electrode chip 2 of a part to abut on the rotating center of the chip cutter 1. In order to polish this unground remainder, a fixed chip guide 9 of a tool main body 4 is pulled out from the electrode chip 2 which is inserted into a fixed chip guide 10 at the opposite side and in the same way, the motor is rotated and the unground remainder is polished by sand paper 8. At this time, since the fixed chip guide 10 is provided eccentrically with respect to a center line 5a of the cutter case 5, the whole

surface of the electrode chip 2 is
smoothened and grinding chips
can be removed.

17/27 © EPODOC / EPO

PN - [JPS5813680](#) A 19830126

PNFP - JPS637587B B2 19880217

PR - JP19810110755 19810717

AP - JP19810110755 19810717

DT - I

CT - (A)
[JPS48109241U](#) U []

FI - C09J7/02; C09J7/02&Z;
C09J7/02+JLB; C09J7/02+JLC

FT - 4J004/AB01; 4J004/CC02;
4J004/EA03

PA - (A)
ASAHI DOW LTD

TI - (A)
ADHESIVE TAPE

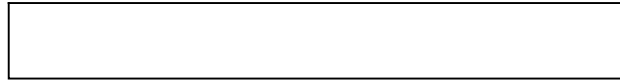
AB - (A)
PURPOSE:An adhesive tape,
prepared by forming many flaws
irregularly arranged along the
selvedges thereof in the long
direction, and capable of being
cut only tearing off with fingers
without using a **cutter** with a
very little deterioration in the
strength. CONSTITUTION:A broad
tape material is wound in the
form of a roll, and cut in round
slices by a circular **cutter** 1
having a blade 2 on the
circumference and a file surface
having abrasive grains 4 on both
sides to a given width. Thus, the
aimed tape, having many flaws
irregularly arranged along the
selvedges in the long direction
thereof, and capable of being
roughened on the slit surfaces 8
simultaneously with the cutting.
The slit surfaces 8 may be
ground by an **emery paper** in the
radial direction. The flaws have



such a depth as to give a tear starting effect in the transverse direction of the tape, and the flaws are preferably present in a ratio of one or more per 0.2cm length.

18/27 © EPODOC / EPO

PN - [JPS63250603](#) A 19881018
 PNFP - JPH0567922B B2 19930927
 PR - JP19870086414 19870408
 AP - JP19870086414 19870408
 DT - I
 FI - G02B6/00&326; G02B6/04&D
 FT - 2H038/BA44; 2H046/AA28;
 2H046/AC21; 2H046/AD00
 PA - (A B2)
 MITSUBISHI RAYON CO
 TI - (A)
 CONTINUOUS MANUFACTURE OF
 LIGHTING TAPE MADE OF OPTICAL
 FIBER
 AB - (A)
 PURPOSE:To continuously
 manufacture a lighting tape
 made of an optical fiber, by
 forming a light leaking part at a
 prescribed position of an optical
 fiber tape. CONSTITUTION:When
 an optical fiber tape 1 passes
 through a heating and pressing
 machine 21, its side face is
 heated and pressed by **emery**
paper 4 and a heating plate 5 at
 every one pitch, and a light
 leaking part is formed in a shape
 corresponding to a rubber
 cushion 6 which has been placed
 under the tape 1. Also, after
 having passed through the
 pressing machine 21, as for the
 tape 1, marking is performed at a
 prescribed position with respect
 to the light leaking part by a
 marking stamp 8 of a marking
 machine 22. Subsequently, the
 tape 1 is led into an adhesive



tape laminating machine 23, a sticking roller 11 ascends at a prescribed timing and an adhesive tape is laminated. After having laminated by a prescribed length portion, only the adhesive tape is cut by an adhesive tape **cutter** 13. Thereafter, the tape 1 is fed to a cutting machine 24 and cut to prescribed length, or wound to a bobbin as it is.

19/27 © EPODOC / EPO

PN - [JP2000271539](#) A 20001003

PR - JP19990080769 19990325

AP - JP19990080769 19990325

DT - I

FI - B05B15/00; B05D3/12&B;
B05D7/14&S; B24B29/00&G;
B25B33/00

FT - 3C031/AA02; 3C058/AA01;
3C058/AA05; 3C058/AA07;
3C058/AA14; 3C058/BA07;
3C058/CA01; 3C058/CA04;
3C058/CB03; 3C158/AA01;
3C158/AA05; 3C158/AA07;
3C158/AA14; 3C158/BA07;
3C158/CA01; 3C158/CA04;
3C158/CB03; 4D073/AA01;
4D073/BB03; 4D075/BB02X;
4D075/BB03Z; 4D075/BB20Z;
4D075/CA47; 4D075/DA27;
4D075/DB02; 4D075/DC12

PA - HONDA MOTOR CO LTD

TI - METHOD FOR REPAIRING
COATING AND REPAIRING TOOL

AB - PROBLEM TO BE SOLVED: To
inhibit see-through of an
intercoat while a coated face is
prevented from being ground
unevenly when foreign matter on
the coated face is removed.
SOLUTION: A blade tool 3 such as
a **cutter** blade or the like is
provided in a holder 2 wherein
one direction of a lower face is



made an inclined face K, and a tip of a lower end cutting blade is set to face on near the inclined face K. When the inclined face K is brought in contact with a painted face, a repairing tool 1 wherein the cutting tool and the painted face are likely to have an inclined angle, is provided. Then, after shaving off a projected part of foreign matter to a specific height with the repairing tool 1, it is ground with a **sand paper** and thereafter, finished by polishing with a polisher.

20/27 © EPODOC / EPO

PN - [JP63214412](#) A 19880907
 PR - JP19870049165 19870304
 AP - JP19870049165 19870304
 DT - I
 CT - || STSE (A)
 [JP61074414B](#) B 00000000 []
 CCI - [B29C33/3842](#)
 CCA - [B29C2033/385](#)
 FI - B29C33/40
 FT - 4F202/AH17; 4F202/AH24;
 4F202/AJ03; 4F202/AJ10;
 4F202/AJ11; 4F202/CD00;
 4F202/CD02; 4F202/CD03;
 4F202/CD18; 4F202/CD22
 PA - NISSAN SHATAI CO
 TI - PREPARATION OF MASTER-
 PATTERN MOLD
 AB - PURPOSE:To obtain a master-
 pattern mold being light-wt. and
 easily handled in a few
 manufacturing days and at a low
 cost, by forming a few main body
 of the master-pattern mold by
 cutting a raw material formed a
 resin foam and a like, coating
 the surface of the main body of
 the master-pattern mold with a
 surfacers and forming a model
 surface with the surface of the



surfacers. CONSTITUTION: A raw material 8 is prepared by laminating blocks 14 of a hard urethane foam and reinforcing pipes 13 are therein inserted and a rough cutting is carried out by using a built-in blade 15 and the like. Cutting operation of a master-pattern mold is carried out by using a **cutter** 9 based on NC data obtained from a clay model. The surface of the main body 11 of the master-pattern mold is coated with a urethane foam resin as a surfacer by means of a brush coating or a spray gun and the finishing of the surface of the main body 11 of the master-pattern mold is carried out by means of wet sanding with **sand paper** while the shape is being measured to complete the master-pattern mold.

21/27 © EPODOC / EPO

PN - [GB190624044](#) A 19071010

PR - GBT190624044 19061029

AP - GBD190624044 19061029

DT - I

PA - NEWLANDCHARLESLESLIE

TI - Improvements in or connected with Apparatus for Printing and Cutting **Paper**, Fabrics and the like

AB - 24,044. Newland, C. L. Oct. 29. Rotary machines; printing on **sand-paper** and the like; cutting and perforating apparatus; inking- apparatus. - The, web of **paper**, fabric, &c. to be printed and cut into sheets passes from a roll a, Fig. 1, between one or more pairs of printing and impression rolls d, c according to the number of colours desired, fed by inking-



rolls e, as in Specification No. 4616, A.D. 1905. At the same time, the web may be longitudinally cut or perforated, after which it passes to the main transverse **cutter**. This consists of two blades j, k, Fig. 2, the upper one j being pivoted to the lower and carrying a presser blade t. It is actuated through a lever r pivoted at r<1> and depressed by a cam i acting on a roller s. The return movement is given by a spring r<2>. The lower blade k is pressed forward by springs l<1>, so that the knife-edges are kept sharp by friction. The feed-roller y is continuously rotated, but the segmental rings x are normally held out of contact with it, so that the **paper** is not fed during the cutting operation. Just as the knife j, however, reaches its lowest point a stop 8 depresses the finger 7 on the shaft x<1> and brings the parts x, y into contact with the **paper**. The holding-fingers v, pivoted to the shaft w, are raised when the knife blade is raised, by a stop w<2> contacting with the finger w<1>.

22/27 © EPODOC / EPO

PN - [GB190511628](#) A 19060118
 PR - GBT190511628 19050602
 AP - GBD190511628 19050602
 DT - I
 PA - HADDAN HERBERT JOHN [GB]
 TI - A New or Improved Machine for Planing or Levelling the Surfaces of Bowling Alleys and the like.
 AB - 11,628. Haddan, H. J., [Porter, J. M.]. June 2. Planing; tools.- A machine for planing or dressing the surfaces o f bowling-alleys and the like in a single journey



without lateral movement of the **cutter** head, of the class having a horizontal disk **cutter** of diameter equal to the width of the work, consists of a frame 1, mounted on wheels 2, travelling along rails 6, which are supported in chairs 7, resting on clamps 9, secured to the ball return race 10 or kerb, vertical adjustment being obtained by screws 11. In bearings 14, 17, fixed to the frame, is journaled a shaft 12, carrying a **cutter**-head 13 of skeleton-wheel form, the rim at points in line with the spokes being flat to form seats for the cutting-tools 27. In order to adjust the **cutter** vertically, the shaft 12 is screwed at its upper end through a nut 22, which also holds in place the bearing-cap 21 which, together with the boss 18, is provided with a ball race 20. To the shaft 12 is secured by a set-screw the collar 23, and by a spline and groove a bevelwheel 25 mounted on a collar 26 and meshing with a bevel-wheel 28 on a shaft 29. This shaft is driven by a belt 53 from a motor 50, which may be moved by set-screws to adjust the tension of the belt. It also, by means of a belt 46, drives the **sand-paper** roll 40; adjusted vertically by nuts which are fitted on to threaded rods connected to the bearings 41, the belt passing over a guide and tightener adjustable by nuts on a screwed rod. A worm 32 on the shaft 29 engages the worm 35 on a horizontal shaft 34 which is connected by a sliding clutch operated -by a lever with another worm gearing with a worm fixed to the front axle. Secured to the frame in front of the axles are

brackets in which are secured
the shanks of brushes for
removing chips from the rails.

23/27 © EPODOC / EPO

PN - [GB1489934](#) A 19771026
PR - CA19730188828 19731221
AP - GB19740055603 19741223
DT - **
CCI - [D01H15/00](#) ; [D01H1/38](#)
PA - DU PONT CANADA
TI - RING-TWISTING APPARATUS
AB - 1489934 Ring spinning:
threading-up and cutting yarn
DU PONT OF CANADA Ltd 23 Dec
1974 [21 Dec 1973] 55603/74
Heading DID In a ring spinner at
the start of winding yarn is
sucked to waste via the lowered
traveller, a guide is rotated to
carry yarn running between the
traveller and the waste sucker to
engage snapping means at the
spindle base, the ring is raised
to snag the yarn and break the
yarn running to waste, and the
ring is traversed to wind yarn,
and at the end of winding the
ring is lowered and the guide is
positioned to deflect yarn
running from the traveller from
contacting. a **cutter** mounted on
the waste sucker until the ring is
low enough such that, on cutting
of the yarn by the **cutter**, the
incoming yarn enters the waste
sucker immediately. To start
spinning, Fig. 1 yarn 31 is
passed through traveller 18 into
intake 24 of suction means 23.
Pulley 12, below lowered ring 17,
is rotated via cord 19 so that
edge 15 of pulley guide 14 abuts
yarn section 32 Fig. 2A. Pins 10
and its yarn snagger 11 are then
rotated, and pulley 12 rotated
with edge 15 until Fig. 3A,



section 32 engage snagger 11. Ring 17 is raised to its regular traversing position and the yarn enters a crack 33 above snagger 11 and is snagged on a **sand paper** disc lying in the crack. The yarn then breaks between the pins and the suction means. When pins 10 are fully wound the ring is lowered and guide 14 is positioned so that the running yarn rises over guide edge 16 and thus avoids guide 25 on means 23. When the ring is low enough the yarn is pulled down guide edge 15 and is guided by guide 25 to **cutter** 26 on means 23.

24/27 © EPODOC / EPO

PN - [CN2936532Y](#) Y 20070822
 PR - CN20062104065U 20060525
 AP - CN20062104065U 20060525
 DT - I
 PA - ZHOU ZHIYONG [CN]
 TI - **Sand paper cutter**
 AB - The utility model discloses a **cutter** for **sand paper**, which comprises a feeding device (6) and the cutting device (1), while they are connected to each other. The utility model is characterized in that a transporting roller and a leveling roller group are arranged on the feeding device, wherein the leveling roller group comprises a main roller (15) and the vice roller (14). The cutting device has an operative platform. An X-axis guide way and Y-axis guide way are arranged on the cutting device, wherein the focusing head (9) is arranged on the X-axis guide way. The laser (8) is arranged on the machine frame, with the



laser lights focused by the focusing head arranged on the X-axis guide way through the flying light path. A press device is also arranged on the cutting device. The utility model applies laser to the field of **sand paper** cutting, which enables the cut **sand paper** to be smoother and more even with fast cutting speed. Physical intensity of the utility model is low, which prevents industrial injury accidents.

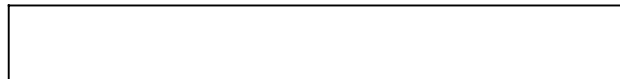
25/27 © EPODOC / EPO

PN - [CN201067164Y](#) Y 20080604
 PR - CN2006249188U 20061219
 AP - CN2006249188U 20061219
 DT - I
 PA - SHANGHAIZHANGXIAOQUAN
 SHEAR M [CN]
 TI - Nail clipper with file **cutter** or
 abrasive **paper**
 AB - A nail clipper provided with a
 file comprises a handle 1 and a
 clipper body 2. 3 is embedded on
 1, a small file or **sand paper**
 belonging to beauty facilities
 can be embedded into a
 traditional nail clipper. When in
 use, burr in a nail can be rasped
 directly by 3 without adopting
 other tools for coping, thereby
 bringing great convenience to
 users. One clipper can be taken
 as two tools, thus being very
 convenient.



26/27 © EPODOC / EPO

PN - [CN1843702](#) A 20061011
 PR - CN2006150661 20060501
 AP - CN2006150661 20060501
 DT - I
 PA - WU XUHAO [CN]
 TI - Method for processing
 abrasive **paper** and abrasive



band

AB - The invention discloses a method for processing **sand paper** and sand band. Wherein, using computer to generate the needed shape of **sand paper** or sand band into graph; transmitting the graph parameters into laser **cutter**; the laser **cutter** according to said graph to process non-contact automatic cutting on the **sand paper** or sand band. With said invention, the whole process is completed on one laser **cutter**, with high speed, smooth cut edge, lower waste and the application for variable shape, without any mould.

27/27 © EPODOC / EPO

PN - [CN2073336U](#) U 19910320

PR - CN1990217786U 19900810

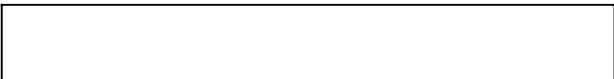
AP - CN1990217786U 19900810

DT - I

PA - HEILONGJIANG PROV
AGRICULTURAL [CN]

TI - DEVICE FOR REPAIRING VALVE SEAT

AB - The utility model relates to a device for repairing a valve seat, which belongs to a tool for repairing valve-seat bores in the maintenance of internal combustion engines. The utility model is composed of a longitudinal and transversal microfeed mechanism formed from that threaded components with different screw pitches are matched mutually inside and outside, a square support body, an accessory shaft, a locating shaft, a tool bar, a **cutter**, etc. After a grinding head is changed, a **sand paper** is clamped on the conical surface of the grinding



head by that an upper and a lower screwing nuts are matched with an upper and a lower clamping rings of the **sand paper**. The utility model can complete the manual milling and grinding repair processed to the valve-seat bore. The utility model has the advantages of wide applicable model, multiple operational items, high repairing precision, low equipment investment and simple operation.

[SS 17] ..v

[EPODOC: SS 17] **abrasive 1w paper**

Results in EPODOC **2.055**

[SS 18] **17 and 10**

Results in EPODOC **31**

[SS 19] ..li



1/31 © EPODOC / EPO

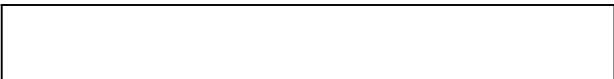
PN - [CN206029521U](#) U 20170322
 PR - CN20162766192U 20160721
 AP - CN20162766192U 20160721
 DT - I
 PA - GUANGDONG BOSSKY TECH CO LTD
 TI - Intelligence **cutter** handle of a knife system of polishing
 AB - The utility model discloses an use novel intelligence **cutter** handle of a knife system of polishing, it includes: frame, longitudinal movement device, rotary device, clamping device, two lateral shifting devices, two power device, two rub assembly and controllers, the equal



electric connection of controller in longitudinal movement device, rotary device, two lateral shifting devices and two power device. The controller can carry out data acquisition to the **cutter** handle of a knife of fixed mounting on stepping up the device earlier voluntarily, adopts promptly a little, and the controller is controlled the longitudinal movement device and is released, and two lateral shifting devices all are close to toward the longitudinal movement orientation, draw close toward the centre promptly, and power device works and drives the rotary device rotation, and the **abrasive paper** circulation rotation on the friction assembly is polished to the **cutter** handle of a knife. The utility model has the advantages of convenient to use, efficient, with low costs, product quality is stable, the product is pleasing to the eye and avoid haring the personal safety.

2/31 © EPODOC / EPO

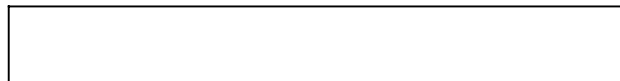
PN - [CN106426422](#) A 20170222
 PR - CN20161608736 20160729
 AP - CN20161608736 20160729
 DT - I
 PA - SUZHOU GAOTONG MACHINERY
 TECH CO LTD
 TI - Edge trimmer for wood products
 AB - The invention relates to an edge trimmer for wood products. The edge trimmer is mainly composed of a workbench, a first fixing mechanism, a second fixing mechanism, edge guide **cutter** fixing blocks, edge guide cutters, **abrasive paper** fixing blocks, **abrasive paper**



fixing frames, air blowing pipes, a moving baffle, a fixing frame, guide rails and **abrasive paper**. A fixing piece is arranged between the first fixing mechanism and the fixing frame. The edge guide **cutter** fixing blocks, the **abrasive paper** fixing blocks and the air blowing pipes are symmetrically arranged on the two sides of the workbench side by side. The guide rails are located on the workbench. The fixing frame is located above the guide rails. The edge guide cutters are arranged on the edge guide **cutter** fixing blocks. The **abrasive paper** fixing frames are arranged on the **abrasive paper** fixing blocks. The **abrasive paper** is arranged on the **abrasive paper** fixing frames. The edge trimmer for the wood products has the beneficial effects of being good in edge trimming effect, good in use performance, simple in structure and long in service life.

3/31 © EPODOC / EPO

PN - [CN205947077U](#) U 20170215
 PR - CN20162552097U 20160611
 AP - CN20162552097U 20160611
 DT - I
 PA - LIU QINGFANG
 TI - Coconut device of peeling
 AB - The utility model provides a process of peeling, machining efficiency is high, and simple structure easily operates moreover that coconut device of peeling, the coconut can be accomplished to an operating procedure. Constitute by gang tool, last oblique sword, side sword, bottom surface sword, limiting plate, coconut, puck, the



gang tool is by below
 horizontally bottom surface
 sword and vertical side sword
 and go up the last oblique knife
 tackle that square neck inclined
 put and become, and this
 three **cutter** combination forms
 a whole and in a plane, the
 limiting plate is a cylinder board
 that has the circular arc, and
 this limiting plate is installed
 the gang tool middle part, the
 external diameter of the normal
 coconut of diameter ratio of
 circular arc is slightly big, the
 puck is equipped with two sets
 ofly, arranges the both sides of
 puck, the coconut is laid the
 puck with position between the
 limiting plate, its surface uses
 the big **abrasive paper** of coarse
 frictional force to make, at the
 during operation the puck is
 rotatory, thereby drives rotatory
 and the extrusion of coconut the
 gang tool.

4/31 © EPODOC / EPO

PN - [CN106269421](#) A 20170104
 PR - CN20161648448 20160809
 AP - CN20161648448 20160809
 DT - I
 PA - SHANDONG TAIKAI ELECTRIC
 APPARATUS INSULATION CO LTD
 TI - Surface treatment paint spraying
 process for epoxy glass fiber
 vacuum pressure gum dipping
 pipe
 AB - The invention belongs to the
 technical field of epoxy glass
 fiber vacuum pressure gum
 dipping pipes and discloses a
 surface treatment paint spraying
 process for an epoxy glass fiber
 vacuum pressure gum dipping
 pipe. The surface treatment paint
 spraying process comprises the



following steps that (1) the surface of the gum dipping pipe is subjected to polishing treatment, specifically, a numerical control lathe is adopted, a **cutter** is replaced with an arc-shaped **cutter** provided with **abrasive paper**, product surface polishing is conducted under the conditions that the rotation speed of the lathe is 800 r/min and the feeding speed of the arc-shaped **cutter** is 300 mm/min, then dust on the polished surface is cleaned up with cotton yarn, and the surface of the gum dipping pipe is wiped with alcohol and dried in the air; (2) paint is mixed, specifically, high-resistance insulating varnish, epoxy resin, a curing agent, a binder and a flame retardant are mixed, and the viscosity of the mixed paint is 15-25 seconds; and (3) the surface of the gum dipping pipe in the step (1) is sprayed with the paint in the step (2). According to the surface treatment paint spraying process for the epoxy glass fiber vacuum pressure gum dipping pipe, the appearance quality of the surface of the gum dipping pipe can be improved, the surface resistivity and the surface flashover voltage of the gum dipping pipe are increased, and dielectric losses of the gum dipping pipe are decreased.

5/31 © EPODOC / EPO

PN - [CN105946008](#) A 20160921

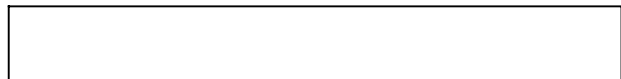
PR - CN20151940933 20151214

AP - CN20151940933 20151214

DT - I

PA - WANG YOUXIN

TI - Multifunctional lifting cutting



bed

AB

- The invention discloses a multifunctional lifting cutting bed. The multifunctional lifting cutting bed includes a rack; the left side of the rack is provided with a U-shaped seat and is rotatably provided with an **abrasive paper** roller; the left side of the upper end of the rack is provided with a guide roller, and the upper part of the right end of the rack is hinged to a movable **cutter**, wherein the movable **cutter** is rectangular column-shaped, and four edges of the movable **cutter** are cutting blades; the rack at the left side of the movable **cutter** is fixedly provided with an **abrasive paper** guide plate, is provided with a gap, and is fixedly provided with a fixed **cutter**; a side wall of the rack under the movable **cutter** is provided with a support beam and a baffle plate support; a support rod passes through the support beam; the upper end of the support rod is provided with a material loading plate, and the lower end of the support rod is connected to the support beam through a spring; the baffle plate support is positioned at the right side of the movable **cutter** and is provided with a baffle plate; and the upper end of the **abrasive paper** guide plate is provided with a row of hand guard bars. The multifunctional lifting cutting bed is reasonable and skillful in structure design, is easy to manufacture, can cut **abrasive paper** with different specifications, is high in cutting efficiency, and is good in effect. Through four cutting blades, the **cutter** can be utilized to the greatest extent.

6/31 © EPODOC / EPO

PN - [CN205465529U](#) U 20160817

PR - CN20162135726U 20160224

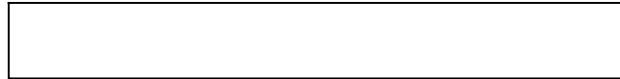
AP - CN20162135726U 20160224

DT - I

PA - SUZHOU NEW DISTR XINGHUA
PACKING CO LTD

TI - Buffing machine is used in
processing of wood pallet

AB - The utility model discloses a
buffing machine is used in
processing of wood pallet,
including support, arm, **cutter**
and pallet fixing device polish.
The support top is provided with
and is provided with X to the
slide rail to the Y who goes on
stretching out and drawing back
to telescopic link, support
bottom one side along Y. The one
end of arm is rotated to the
telescopic link with Y and is
connected, and the other end of
arm is provided with the
mounting hole. Polish the **cutter**
setting directly over X is to the
slide rail, the **cutter** of polishing
includes rotation axis, first
motor and **abrasive paper** layer,
the rotation axis rotates with the
mounting hole to be connected,
the one end and the first motor
fixed connection of rotation axis,
and the other end cladding of
rotation axis has can be used for
waiting to polish the **abrasive**
paper layer of polishing and
polishing usefulness in wooden
pallet surface. X on to the slide
rail sliding connection have the
pallet fixing device that can be
used for the fixed wooden pallet
of installation. After adopting
above -mentioned structure,
simple structure, degree of
automation is high, polishes



efficiently.

7/31 © EPODOC / EPO

PN - [CN105774383](#) A 20160720

PR - CN20161191279 20160330

AP - CN20161191279 20160330

DT - I

PA - GUANGZHOU CITY
CONSTRUCTION COLLEGE

TI - Drawing method of drain powder
flat plastic lacquer painting

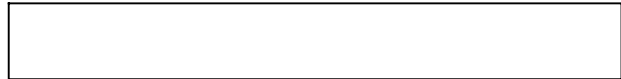
AB - The invention discloses a
drawing method of a drain
powder flat plastic lacquer
painting. The drawing method
comprises the following steps:
(1) drain powder and white
emulsion paint are mixed by a
mass ratio of 1: 2 to produce a
flat painting bottom on a
drawing board, and are flatly
grinded by using a
coarse **abrasive paper** with a
model number of 150# after
drying; (2) a pattern is designed
on a manuscript **paper**, and is
copied to a flatly grinded
painting bottom; (3) any one of
Chinese lacquer, chemical
lacquer, cashew nut lacquer or
the white emulsion paint is
selected, and is mixed with the
drain powder in proportion to
prepare drain powder lacquer
with different dryness and
humidity; and the drain powder
lacquer with different dryness
and humidity is pressed and
accumulated on the flat painting
bottom by using an oil
painting **cutter** according to
different forms of needed pattern
to obtain a bas-relief form; (4)
the oil painting **cutter** is used for
lightly beating or pressing a
texture form after formation; (5)
color paint is coated after the



texture form is thoroughly dried;
and (6) the lacquer painting
obtained in the step (5) is flatly
painted, grinded and polished;
the **abrasive paper** is used for
grinding out the texture to show
the stippling drawing effect; and
the lacquer painting with a
special mottled effect is formed.

8/31 © EPODOC / EPO

PN - [CN205272107U](#) U 20160601
PR - CN201521050008U 20151214
AP - CN201521050008U 20151214
DT - I
PA - WANG YOUXIN
TI - Multi -functional lift cutting bed
AB - The utility model discloses a
multi -functional lift cutting bed,
including the frame, the frame
left side is equipped with U type
seat and rotates
installation **abrasive paper**
roller, and the upper end left
side of frame is equipped with
the deflector roll, and the **cutter**
is moved to articulated the
installing in right -hand member
upper portion, moves the **cutter**
for the square cylindricity, and
its four edges are the cutting
edge, moves that fixed mounting
has the **abrasive paper** deflector
in the left frame of **cutter**, be
equipped with the breach and
fixed mounting has quiet **cutter**,
being equipped with supporting
beam and a baffle support on
moving the rack side wall
of **cutter** below, having passed
the bracing piece in the
supporting beam, the upper end
of bracing piece is equipped with
one and carries flitch, lower
extreme and pass through spring
coupling on a supporting beam,
and the baffle support is located



the right side of moving the **cutter**, installs the baffle on the baffle support, is equipped with a gear hand saver pole on the **abrasive paper** deflector. The utility model has the advantages of reasonable design ingenious, make convenient to use, can cut different specifications as required, cut efficient, effectual, the design of the four sides cutting edge of cutting knife, the biggest utilization that messenger's cutting knife obtained.

9/31 © EPODOC / EPO

PN - [CN205218141U](#) U 20160511

PR - CN20152888707U 20151110

AP - CN20152888707U 20151110

DT - I

PA - SUZHOU WIN-TECH TOOLS MFG
CO LTD

TI - Multifunctional mill

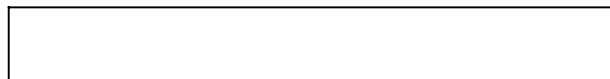
AB - The utility model discloses a multifunctional mill, including electric motor rotor and set up at the epaxial function of electric motor rotor's output end, electric motor rotor's output is provided with the head capsule, be provided with the chuck in the output shaft, the installation department setting of function end is in the chuck, and the tip of output shaft is provided with and is used for compressing tightly the gland nut in the output shaft with the chuck, be provided with bearing structure on the head capsule, the installation department of function end passes through the chuck and gland nut installs on electric motor rotor's output shaft, and the function end is milling **cutter** or **abrasive paper**



or drill bit, when needing the
different function end of
installation, backs out gland nut,
alright change the chuck and the
function is held, when the
installation department
mounting dimension of function
end changed, it could to change
the chuck.

10/31 © EPODOC / EPO

PN - [CN105252585](#) A 20160120
PR - CN20151781102 20151116
AP - CN20151781102 20151116
DT - I
CT - || STSE (A)
 [JPH10258238](#) A 19980929
 [A] (TOSHIBA CORP)
 [A] 1-9
 * 全文 *;
 [JPH11217147](#) A 19990810
 [A] (MIYAKOSHI MACHINERY CO
 LTD)
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 [CN202272548U](#) U 20120613
 [A] (MASTERWORK MACHINERY
 CO LTD)
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 [JP5481218B](#) B2 20140423 [A]
 [A] 1-9
 * 全文 *;
 [CN104441964](#) A 20150325
 [A] (JIANG CHONGZHEN)
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 * 全文 *;
 [CN204250989U](#) U 20150408
 [A] (YUTIAN COUNTY DAHENG
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 * 全文 *;
 [CN205219279U](#) U 20160511
 [R] (HEBEI TIANYUHENG TECH CO
 LTD)
 [R] 1-9
 * 权利要求1-9 *
PA - YUTIAN COUNTY DAHENG

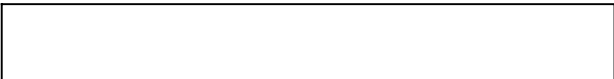


PRINTING MACHINERY CO LTD

- TI - Single **abrasive paper** cutting and inspecting machine
- AB - The invention discloses a single **abrasive paper** cutting and inspecting machine which comprises a cutting mechanism, a detecting and waste-discharging mechanism, a turnover and conveying mechanism, and a counting and stacking mechanism, wherein an output end of the cutting mechanism and an input end of the detecting and waste-discharging mechanism are correspondingly arranged; a qualified product output end of the detecting and waste-discharging mechanism and an input end of the turnover and conveying mechanism are correspondingly arranged, and an unqualified product output end of the detecting and waste-discharging mechanism and an input end of a waste-discharging conveying device are correspondingly arranged; and an output end of the turnover and conveying mechanism and an input end of the counting and stacking mechanism are correspondingly arranged. The single **abrasive paper** cutting and inspecting machine can be used for dividing wide belt-shaped **abrasive paper** belts produced by a linked **abrasive paper** production line into single abrasive belts with set width by virtue of a longitudinal **cutter**, and the single abrasive belts are counted and stacked into **abrasive paper** stacks after being subjected to automatic cutting, quality detecting, waste-discharging and positive-negative turnover, so that the

problems in a conventional manual operation mode adopted by a current single **abrasive paper** production process are solved.

11/31	© EPODOC / EPO
PN	- CN104849810 A 20150819
PR	- CN20151281869 20150528
AP	- CN20151281869 20150528
DT	- I
CT	- STSE (A) CN102193147 A 20110921 [A] (ZHU HAIJIAN) [A] 1-3 * 全文 *; CN102798933 A 20121128 [X] (WUXI ADVANCE OPTICAL FIBER CO LTD) [X] 1-3 * 说明书第[0012]至第[0019]段 , 附图1 *; CN103630972 A 20140312 [A] (CAI WENLONG) [A] 1-3 * 全文 *; CN204666861U U 20150923 [R] (SHANGHAI HONGHUI OPTICS COMM TECH CO LTD) [R] 3 * 权利要求1 *
CNOI	- G02B6/25
PA	- SHANGHAI HONGHUI OPTICS COMM TECH CO LTD
TI	- Optical fiber cutting method and sandpaper cutter
AB	- The present invention discloses an optical fiber cutting method which comprises a step of pressing a bare optical fiber on a rubber pad to be parallel with two sides of the rubber pad, a step of allowing a sandpaper cutter to vertically press the middle part of the bare optical fiber, and a step of allowing the rubber pad to bend



upward by using force such that a part of the bare optical fiber pressed by the sandpaper **cutter** is broken. The operation is easy, the sandpaper **cutter**, an optical fiber **cutter** is not needed, and the daily maintenance of a blade is not needed. The invention also discloses the sandpaper **cutter** which comprises an 88mm*30mm waterproof **abrasive paper** and a tape. The waterproof **abrasive paper** is divided into a 30mm*30mm first area, a 30mm*30mm second area and a 28mm*30mm third area from left to right. The abrasive surface of the first area is outward folded to cover the second area, and the abrasive surface of the third area is outward folded to cover the first area. The overlapped three areas are bonded together by the tape, and the two sides with sands are used as the blades of the **cutter**.

12/31 © EPODOC / EPO

PN - [CN104802450](#) A 20150729

PR - CN20151150006 20150331

AP - CN20151150006 20150331

DT - I

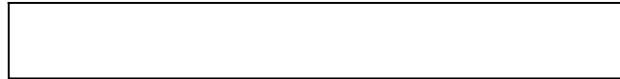
CT - || STSE (A)
[CN1736814](#) A 20060222 [A] (HU QIZHONG [CN])
 [A] 1-6
 * 全文 *;
[US2008119343](#) A1 20080522
 [A] (ZOECKLER MICHAEL D [US])
 [A] 1-6
 * 全文 *;
[CN101612818](#) A 20091230
 [A] (SHENZHEN JINCAI PRINTING & PAC)
 [A] 1-6
 * 全文 *;
[CN102476472](#) A 20120530



	[A] (SHENZHEN MYS ENVIRONMENTAL PROT & TECHNOLOGY CO LTD) [A] 1-6 * 全文 *
CTNP	- STSE (A) [Y] - 邵会明等, "浅谈纸盒模切版的制作和应用", 《科技创新与应用》, [Y] 4 * 第26页右栏第11行-第22行 * [YX] - 葛海英等, "纸盒的模切工艺质量控制", 《印刷技术》, [Y] 4 * 第7页左栏第1行-第8页第37行 * [X] 1-3 、 5-6
PA	- ANHUI JIAXIN PACKAGING & PRINTING CO LTD
TI	- Gift box die cutting process
AB	- The invention discloses a gift box die cutting process. A steel cutter used in the die cutting process is an imported carbon steel cutter and is sharp in cutting edge and long in service life. A laser die cutting technology is adopted to perform cutting of a die cutting plate, and the cutting speed is 25 cm/s. The die cutting process is high in die cutting speed, enables cuts to be order and prevents an inclination phenomenon. A pressure adjusting method is a local pad paper layer number gradual increasing or decreasing method and enables the pressure to be accurately adjusted. A sponge rubber strip of hardness 2.5 HB is used, enables the cuts to be quickly rebound and enables operation speed to be high. Abrasive paper is used for grinding the cuts, the cuts can be order and smooth, and gift boxes can be more attractive in appearance.

13/31 © EPODOC / EPO

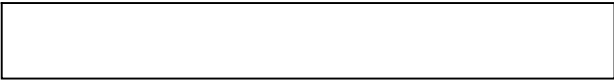
PN - [CN204414999U](#) U 20150624
PR - CN2015206263U 20150106
AP - CN2015206263U 20150106
DT - I
PA - SHAO XIANGWEN
TI - Sleeking **cutter**
AB - The utility model discloses a
sleeking **cutter** which is used for
carrying out fine re-machining
on carved decorative patterns
and stitches on a rough
machining pattern of a wood
carving technological work. The
sleeking **cutter** comprises
a **cutter** rod and a **cutter** head,
wherein the **cutter** head is
formed by stretching from one
end of the **cutter** rod and
comprises a front **cutter** surface,
a rear **cutter** surface, an
auxiliary rear **cutter** surface and
an end surface; the front **cutter**
surface comprises a first end
line and a second end line; a
main cutting edge is formed by
an intersecting line of the
rear **cutter** surface and the
front **cutter** surface, and an
auxiliary cutting edge is formed
by an intersecting line of the
auxiliary rear **cutter** surface and
the front **cutter** surface; the main
cutting edge obliquely stretches
from a corresponding position of
the first end line to a
corresponding position of the
second end line and stretches
from a corresponding position of
the second end line to the
direction facing the end surface
in an upwards convex arc way.
When the sleeking **cutter** is
adopted for carving, the
sleeking **cutter** can be attached
to the change of the contour edge



of a product line for cutting,
surface texture on a **cutter**
cannot be generated, an **abrasive**
paper is not needed for further
polishing, and the pattern of a
product can be lifelike and vivid.

14/31 © EPODOC / EPO

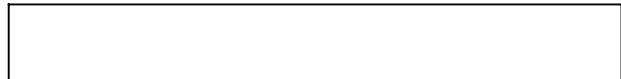
PN	- CN104338937 A 20150211
PR	- CN20141527061 20141009
AP	- CN20141527061 20141009
DT	- I
CNOI	- B23B1/00 ; B23P15/24
PA	- SHAANXI QIYUAN TECH DEV CO LTD
TI	- Method for turning and processing male die of large-scale O-shaped ring mold with die sinking of 45 degrees
AB	- The invention discloses a method for turning and processing a male die of a large-scale O-shaped ring mold with the die sinking of 45 degrees, and relates to the field of mechanical processing, in particular to the method for turning and processing the male die of the large-scale O-shaped ring mold with the die sinking of 45 degrees. The method comprises the following steps: mounting and clamping a workpiece, after rough turning and quenching and tempering, conducting semi-finish turning on a conical surface of 90 degrees till the remained allowance is 0.2-0.3mm, then turning a mold cavity by using a forming cutter , carrying out semi-finish turning till the remained allowance is 0.4-0.6 mm, reducing the rotating speed of a main shaft to ensure the finish turning quality, stopping the main shaft of a turning lathe



when necessary, changing a new forming **cutter**, performing alignment again, inserting an iron bar in a screw hole in a chuck seat, manually rotating the main shaft of the turning lathe for finish turning the mold cavity, continuously cooling and lubricating with a cutting liquid so as to reduce a surface roughness value, finally, when the remained allowance is about 0.1 mm, rotating the main shaft at a high speed, sanding the mold cavity by using metallographic **abrasive paper**, and after sanding the mold cavity, finish turning the mold cavity to form the conical surface. The method disclosed by the invention can solve the problems that the forming **cutter** vibrates, the mold cavity is not aligned, and the workpiece is not easy to align, so that the production cost is reduced, and the processing efficiency is improved.

15/31 © EPODOC / EPO

PN - [CN103551296](#) A 20140205
 PNFP - CN103551296B B 20141217
 PR - CN20131563910 20131114
 AP - CN20131563910 20131114
 DT - I
 CT - || STSE (A)
[CN1121338](#) A 19960424
 [A] (CCA INC [JP])
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 权利要求1-2
[US2003091872](#) A1 20030515
 [A] (YAN YUSHAN [US])
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[CN101115571](#) A 20080130
 [A] (EASTMAN CHEM CO [US])
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 权利要求1-23



[CN102319663](#) A 20120118

[A] (TIANJIN ELECTRIC POWER CORP)

[A] 1

权利要求1

[CN1735465](#) A 20060215

[A] (PPG IND OHIO INC [US])

[A] 1

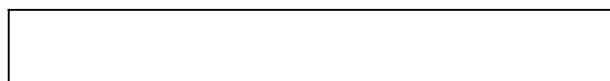
说明书第5页第3段至第12页第1段

- PA - (A B)
HARBIN ELECTRIC MACH CO LTD
- TI - (A B)
Technique for crevice corrosion prevention of polyurea layer coating
- AB - (A)
The invention discloses a technique for crevice corrosion prevention of polyurea layer coating. The technique comprises the following steps: performing pretreatment on the surface of a to-be-coated part, coating the first layer of polyurea primer, coating the second layer of polyurea working layer after complete solidification and drying, within 10-60 minutes, cutting up the polyurea working layer at the position, 100-200 mm away from, and needing to be matched with other part, of the end part of the part by utilizing a wallpaper **cutter**, peeling the polyurea working layer off the surface of the part along the cut edge so as to enable the primer layer of the part without the polyurea working layer to be exposed, after the parts are assembled, roughening the exposed polyurea primer layer by using **abrasive paper**, painting a lap agent on the roughened polyurea primer layer and the to-be-connected polyurea working

layer edges, and painting the polyurea working layer on the lap agent to the required thickness so as to enable the polyurea working layer to be smoothly connected with the original polyurea layer edge. Through the treatment, the polyurea coatings between two parts can form an entity to seal and wrap up the gap between two parts, so that crevice corrosion is prevented.

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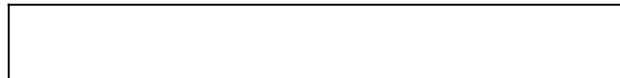
PN - [CN103481065](#) A 20140101
 PR - CN20131426381 20130918
 AP - CN20131426381 20130918
 DT - I
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 [JP2002364455](#) A 20021218
 [A] (NISSAN MOTOR)
 [A]
 [GB2160798](#) A 19860102 [Y] (AE
 PLC)
 [Y]
 [US5170592](#) A 19921215
 [A] (BOULTON MICHAEL A [GB])
 [A]
 [CN202278482U](#) U 20120620
 [A] (ZHENGZHOU DIAMOND PREC
 MFG CO)
 [A]
 [CN103203594](#) A 20130717
 [Y] (SHENYANG AIRCRAFT CORP)
 [Y]
 [CN201537860U](#) U 20100804
 [A] (SHANGHAI D T PREC
 MACHINE PART CO LTD)
 [A]
 [US1920986](#) A 19330808
 [Y] (HUTTO MARSDEN C)
 [Y]
 CNOI - [B23P15/00](#) ; [B24B41/002](#)
 PA - SHENYANG AIRCRAFT CORP
 TI - Boring and honing block and
 machining method thereof



AB - The invention discloses a boring and honing block comprising a base and a positioning straight pin of an integral structure. A machining method of the boring and honing block includes: (1) performing thermal refining to enable hardness of the boring and honing block to be HRC28-32; 2) grinding two profile planes of the base to be polished to keep the two planes in parallel, and taking the two planes as clamping references; 3) performing primary clamping through a numerical control milling machine, using a phi5mm end milling **cutter** for primarily machining a profile, and ensuring L1 tolerance to be +/-0.02mm; 4) polishing with **abrasive paper** to guarantee smooth transition of milled positions. A split structure of the boring and honing block is changed into the integral structure, so that strength of the boring and honing block is enhanced, service life is prolonged by three to four times, and precision is improved; by the machining method, the problem of difficulty in machining due to the fact that the split structure is changed into the integral structure is solved, machining precision is guaranteed, and product quality is improved.

17/31 © EPODOC / EPO

PN - [CN202780723U](#) U 20130313
 PR - CN20122406923U 20120814
 AP - CN20122406923U 20120814
 DT - I
 PA - QIU SHIYU
 TI - **Cutter** board



AB - The utility model provides a **cutter** board which is applied to sharpening a straight cutting edge of a **cutter** and particularly suitable for sharpening woodworking plane blade. The **cutter** board is characterized in that a **cutter** blade is fixed on the **cutter** board. A sharpening angle is fixed through a fulcrum pillar, and the **cutter** is sharpened through combining an **abrasive paper** or a millstone, and thereby best effect is acquired. The **cutter** board is characterized by being simple in structure, convenient to operate and the like.

18/31 © EPODOC / EPO

PN - [CN202278484U](#) U 20120620
 PR - CN20112388748U 20110930
 AP - CN20112388748U 20110930
 DT - I
 PA - KEHUI SONG
 TI - Grinding device
 AB - The utility model relates to a lathe grinding device and particularly relates to a grinding device for grinding through a **cutter** frame. The grinding device comprises a support body for the arrangement of **abrasive paper**, and a supporting rod I and a supporting rod II used for fixing the support body, and the supporting rod II is fixedly arranged on the lathe **cutter** frame through a limit slot. The lathe grinding device is characterized in that the support body is arranged at the two ends of the supporting rod I through bolts, and the central position of the supporting rod I is vertically and fixedly connected with the



support rod II. The grinding device provided by the utility model has the advantages of simple structure, convenience in operation and high safety factor.

19/31 © EPODOC / EPO

PN - [CN202174847U](#) U 20120328
PR - CN20112267546U 20110719
AP - CN20112267546U 20110719
DT - I
PA - FEI WU
TI - Novel pencil
AB - The utility model relates to a novel pencil which comprises a pencil body (1) and a pencil lead (2), wherein a pencil cap (3) is arranged on the pencil body (1); a groove (4) is arranged at one side of the pencil cap (3); and a piece of **abrasive paper** (5) is inlaid in the groove (4). As the novel pencil is provided with the pencil cap and the **abrasive paper** is arranged on the pencil cap, the pencil cap not only can protect the pencil lead from being impacted to break; the **abrasive paper** on the pencil cap be used for conveniently and rapidly polishing the pencil lead, thereby avoiding the phenomenon that fingers are accidentally injured when a **cutter** is used for cutting the pencil lead.



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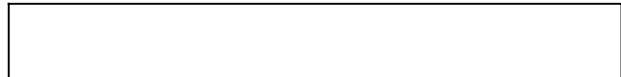
PN - [CN201931367U](#) U 20110817
PR - CN20102661058U 20101215
AP - CN20102661058U 20101215
DT - I
PA - KUNYU SONG
TI - Manual cutting edge trimmer
AB - The utility model relates to a manual cutting edge trimmer,



which comprises a cutting edge trimming part and a burr trimming part, wherein the cutting edge trimming part and the burr trimming part can be glued to form a whole; and the cutting edge trimming part can be made of abrasive cloth or **abrasive paper**, and the burr trimming part can be made of cloth or leather. Therefore, a **cutter**, of which a cutting edge is to be trimmed, is held by a hand, the cutting edge part of the **cutter** is trimmed and ground on the cutting edge trimming part, burrs produced in the trimming and grinding process can be ground on the burr trimming part to be eliminated, and thereby the manual cutting edge trimmer capable of recovering the sharpness of the cutting edge of the **cutter** simply and conveniently is achieved.

21/31 © EPODOC / EPO

PN - [CN201913518U](#) U 20110803
 PR - CN20102639799U 20101202
 AP - CN20102639799U 20101202
 DT - I
 PA - FONGHING PREC INDUSTRY
 HUIZHOU CO LTD
 TI - Long-axis **cutter** head remover
 AB - The utility model discloses a long-axis **cutter** head remover, which comprises a bottom plate. A motor and a support plate are fixedly mounted on the bottom plate; a grinding wheel is fixedly mounted on a rotary shaft of the motor; a positioning table is movably fixed onto the support plate; and a positioning groove is arranged on the positioning table. The grinding wheel is driven to rotate by the motor; a



shaft part to be processed is fixed by the positioning table and then adjusted by a longitudinally adjusting handle and an axially adjusting handle, a joint of the part fixed onto the positioning table can contact with the grinding wheel rotating at a high speed, and burrs at two ends of the part are removed by the grinding wheel. Compared with the prior art, the long-axis **cutter** head remover realizes cutting of the burrs at the two ends of the shaft part by the aid of rotation of the grinding wheel, and avoids the problems of high labor intensity, low operating efficiency and large post-processing error in a traditional manual cutting method with **abrasive paper** for grinding.

22/31 © EPODOC / EPO

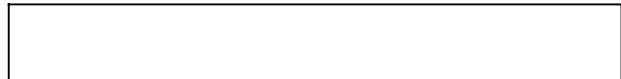
PN	- CN101596617 A 20091209
PR	- CN20081236698 20081201
AP	- CN20081236698 20081201
DT	- I
PA	- HUBEI TRI RING AXLE CO LTD [CN]
TI	- Numerical-control processing method of rolling-forging die cavity
AB	- The invention discloses a numerical-control processing method of a rolling-forging die cavity, belonging to the die technical field by using roll forging, performing and finishing forging. The invention mainly solves the problems of poor processing quality and efficiency of a rolling-forging die cavity in the prior art. The method of the invention is characterized in that 1) the characteristic overall dimensions of the product are



obtained according to product images, and UG software is input correspondingly to obtain the straight cavity images of the rolling-forging die cavity; 2) a horizontal numerical-control machine with a rotary working table is adopted to input die cavity radius and rolling round direction parameters into the UG software so as to obtain the four-axle linkage numerical-control processing procedures of the rolling-forging die cavity of which the parting surface is in circular arc shape; 3) a phi32-35 **cutter** is chosen to carry out numerical control rough mill; 4) a phi16-10 **cutter** is used to carry out numerical control finish mill; 5) a small grinding wheel sheet or **abrasive paper** is used to carry out cavity surface finish. The invention has the characteristics of high rolling-forging die cavity processing precision, good quality, high speed and high degree of automation, and is mainly used for rolling forging die cavity numerical control processing an automobile front axle of which the parting surface is in circular arc shape.

23/31 © EPODOC / EPO

PN - [JPS61146476](#) A 19860704
 PR - JP19840267125 19841217
 AP - JP19840267125 19841217
 DT - I
 FI - B24D7/00&U
 FT - 3C063/AA06; 3C063/AB05;
 3C063/BA02; 3C063/BE12;
 3C063/BH19; 3C063/EE07
 PA - OKUMA SHINICHI
 TI - FLAT ROTARY ABRASIVE DISC
 FITTED WITH **ABRASIVE PAPER**



AB - PURPOSE: To facilitate the attachment or detachment of **abrasive paper** to or from a disc body, by installing an air suction hole, attracting the **abrasive paper** to an upper surface of the rotary disc body with air suction pressure, in this upper surface. CONSTITUTION: With drive of a motor 9, an air discharge piece 1 is rotated together with disc bodies 2 whereby air inside these upper and lower double- sheet disc bodies 2 is made into suction pressure. With an effect of this suction pressure, air comes to be inhaled inside from an air suction hole 4 installed in the upper disc 2 in consequence, so that **abrasive paper** 8 is attracted to this upper disc body 2 by suction force. When rotation of these disc bodies 2 goes high, a degree of coherence of the **abrasive paper** to these disc bodies 2 grows larger, whereby even if a **cutter** is applied to the **paper** 8, its rotation is in no case stopped, thus the **abrasive paper** 8 grinds the center. When this **abrasive paper** 8 is removed for replacement, rotation of the motor 9 is stopped, and suction action by the air suction pressure is released whereby the **abrasive paper** 8 is easily detached from these disc bodies 2.

24/31 © EPODOC / EPO
 PN - [JPH01248035](#) A 19891003
 PNFP - JPH0585018B B2 19931206
 PR - JP19880077925 19880329
 AP - JP19880077925 19880329
 DT - I
 FI - G01N1/28&F; G01N1/28&R;



	G01N1/30; G01N33/48&P
FT	- 2G045/BA03; 2G045/BA14; 2G045/BB22; 2G045/BB24; 2G045/CB05; 2G045/CB13; 2G052/AB16; 2G052/AD12; 2G052/AD32; 2G052/AD52; 2G052/BA15; 2G052/DA07; 2G052/EB11; 2G052/EB12; 2G052/EB13; 2G052/EC02; 2G052/EC11; 2G052/EC23; 2G052/FA00; 2G052/FA02; 2G052/FA08; 2G052/FC02; 2G052/FC15; 2G052/FD00; 2G052/FD18; 2G052/GA19; 2G052/GA32; 2G052/HC22; 2G052/JA04; 2G052/JA07; 2G052/JA11
PA	- (A B2) MARUTOO KK
TI	- (A) METHOD AND APPARATUS FOR PREPARING OPTICAL MICROSCOPE SAMPLE, SOFT X- RAY PHOTOGRAPH SAMPLE AND EPMA SAMPLE
AB	- (A) PURPOSE:To enable the preparation of a specimen having ideal conditions, by arranging processes wherein a block with a sample wrapped and buried is bonded on a slide plate to form a slide block, which is sliced and the sections thereof are ground to be dyed, photographed and analyzed. CONSTITUTION:A small piece 21 of a sample is dewatered and wrapped and buried securely in a resin 22 to form a block 3. Then, an observing part of the block is ground with a waterproof abrasive paper to obtain a bonding surface 31 and the block 3 is dried with an oven range to bond the surface 31 on a slide plate 4 of standard dimensions. The bonding at this

point employs a desired bubble-less bonding method using a bonding material 6, a depression incubator 7 and a weight weighing about 600g as load means. A slide block 5 obtained is cut sequentially using a diamond **cutter** with a suction holder to make a pair of sliced slide blocks 5' and the block 3. A plurality of blocks 5' are produced by the same process from the block 3. The blocks 5' are turned to specimens 1-1" via a rough grinding, finish grinding and a cleaning. Thereafter, a dyeing, soft X-ray photography and EPMA analysis are performed.

25/31 © EPODOC / EPO

PN - [JPS61188079](#) A 19860821
 PR - JP19850025919 19850212
 AP - JP19850025919 19850212
 DT - I
 FI - B24D9/10
 FT - 3C063/AA06; 3C063/AB05;
 3C063/BA02; 3C063/BE04;
 3C063/BG01; 3C063/BG07;
 3C063/BH40; 3C063/EE07
 PA - OKUMA SHINICHI
 TI - SURFACE ROTARY ABRASIVE DISC
 FITTED WITH **ABRASIVE PAPER**
 AB - PURPOSE:To make the
 replacement work of **abrasive
 paper** for a disc body ever so
 easy, by producing the disc body
 covered with the **abrasive paper**
 with a material assuming static
 electricity due to friction.
 CONSTITUTION:When a vinyl
 chloride-make disc body 1 is
 rotated by a motor, **abrasive
 paper** 2 placed on the top of this
 disc body is rotated by frictional
 force whereby static electricity is
 produced between both 1 and 2,



and with action of this static electricity, the **abrasive paper 2** sticks fast to the top of the disc body 1 and rotates together with the disc body 1 as one body, thereby grinding a **cutter** or the like. If rotation of this motor is stopped, the static electricity between the **abrasive paper 2** and the disc body 1 runs out so that the **abrasive paper 2** is easily removed from the disc body 1 for replacement.

26/31 © EPODOC / EPO

PN - [GB1092218](#) A 19671122

PR - AT19640001266 19640214

AP - GB19650005797 19650210

DT - **

CCI - [B24B17/02](#)

CCA - [Y10T74/20402](#)

PA - MASCH EFABRIK ZUCKERMANN
KOMM

TI - Grinding machine

AB - 1,092,218. Grinding; milling machine details.
MASCHINENEFABRIK
ZUCKERMANN WIEN KOMM. GES.
Feb. 10, 1965 [Feb. 14, 1964], No. 5797/65. Headings B3D and B3K.
A machine for grinding the surface of an elongate workpiece having sharp edges disposed transversely to its longitudinal direction comprises first and second grinding wheels, Figs. 1a and 1b, means 17 for effecting relative linear movement between the wheels and workpiece, means 25 for rotating the wheels in a common plane and in opposite directions, and means for ensuring that the first wheel contacts the leading edge of the workpiece but not the trailing edge and for ensuring that the second wheel contacts

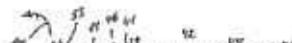


the trailing edge but not the leading edge. The machine may have more than one pair of grinding wheels, for example, five pairs 6 . . . 15 at stations 1 . . . 5 for operating on workpieces, which may be of wood, carried by a conveyer 17 past the grinding wheels. Each grinding wheel, which may consist of leaves of **abrasive paper** projecting radially and supported by bundles of bristles or of a strip of **abrasive paper** supported on a foam rubber wheel, is carried by an arm 22, Figs. 2 and 3 (not shown) which is slidable along guides 24a on a carriage 24 carrying a motor 25 which is connected by a flexible drive shaft 23 to its associated grinding wheel. The carriages 24 of each pair of grinding wheels are adjustably mounted on quadrants 21 whereby the pairs of grinding wheels can be adjusted about the workpieces so that each pair operates on a separate longitudinal strip of a workpiece. The grinding wheels are urged towards the workpieces by pressure devices 22a, which may be springs or pneumatic mechanisms, and are movable away from the workpieces against the action of the devices 22a by cable devices 29 having outer sheaths disposed between abutments 30, 31 and inner cables at one end connected to the arms 22 carrying the grinding wheels and at the other end connected to one end of levers 28, the other ends of which have followers 33 engaging cams 26. The latter are secured to a common drum 37 which is rotated by a chain 39 from a motor 47 and is

connected by a chain 43 to the conveyer 12 so that the conveyer and cams are driven synchronously. The cams control the grinding wheels so that one wheel of each pair grinds a leading but not a trailing edge while the other grinds a trailing but not a leading edge of a workpiece. In another embodiment, the cables are replaced by hydraulic or electric drives. Milling.-Each cam 26<SP>1</SP>, Fig. 5, may be formed by a milling **cutter** 66 carried by a lever 65 which is movable about a pivot 66 by a cable 62 disposed in a sheath 63 having its ends engaging abutments. The other end of the cable is connected to a slide 59 urged by springs to cause a copying roller 60 to engage a model mounted between clamps 55, 56 on a conveyer belt 54.

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- PN - [EP0173042](#) A1 19860305
- PNFP - EP0173042 B1 19880427
- PR - DE19843430991 19840823
- AP - EP19850108701 19850712
- DT - *; Rep
- CT - || STSE (A1)
[DE2306221](#) A1 19730823 [
] (RELIURE IND S T D);
[US2185005](#) A 19391226 [
] (WAGNER CHESTER I)
- CCI - [B26F1/14](#) ; [B26F1/36](#)
- PA - (A1)
MEY KG MASCHF MAFELL [DE]
- TI - (A1)
Punching device, especially
for **abrasive paper** or abrasive
cloth.
- (B1)
PUNCHING DEVICE, ESPECIALLY
FOR **ABRASIVE PAPER** OR



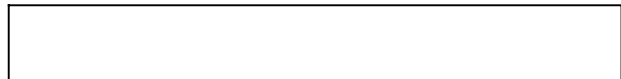
ABRASIVE CLOTH

AB

- (A1)
 1. Punching device, particularly for stip or foil-type material, preferably for **abrasive paper** or grinding cloth, with a punch part (1) carrying at least two punches (2 to 8) and a foldable die part (9) connected to it and provided with a number of dies (10 à 16) corresponding to the number of punches, characterised in that when the device is folded together a punch (2 to 8) engages in each case with each die (10 to 16), whereby in the case of several punches at different distances from the folding axis at least the cutters (36) of the punches (3 to 8) which are located at a greater distance from the folding axis are inclined in such a way to the plane of a punch holding plate (30), that their **cutter** area (37) associated with the folding axis (17) is at a greater distance from the plane of the punch holding plate (30) than the **cutter** area (38) which is at a distance from the folding axis and in that the punches (2 to 8) outside of the **cutter** (36) are tapered towards the attachment end on the punch part (1).

28/31 © EPODOC / EPO

- PN - [CN201067164Y](#) Y 20080604
- PR - CN2006249188U 20061219
- AP - CN2006249188U 20061219
- DT - I
- PA - SHANGHAIZHANGXIAOQUAN
SHEAR M [CN]
- TI - Nail clipper with file **cutter**
or **abrasive paper**
- AB - A nail clipper provided with a
file comprises a handle 1 and a



clipper body 2. 3 is embedded on 1, a small file or sand **paper** belonging to beauty facilities can be embedded into a traditional nail clipper. When in use, burr in a nail can be rasped directly by 3 without adopting other tools for coping, thereby bringing great convenience to users. One clipper can be taken as two tools, thus being very convenient.

29/31 © EPODOC / EPO

PN - [CN1843702](#) A 20061011
PR - CN2006150661 20060501
AP - CN2006150661 20060501
DT - I
PA - WU XUHAO [CN]
TI - Method for processing **abrasive paper** and abrasive band
AB - The invention discloses a method for processing sand **paper** and sand band. Wherein, using computer to generate the needed shape of sand **paper** or sand band into graph; transmitting the graph parameters into laser **cutter**; the laser **cutter** according to said graph to process non-contact automatic cutting on the sand **paper** or sand band. With said invention, the whole process is completed on one laser **cutter**, with high speed, smooth cut edge, lower waste and the application for variable shape, without any mould.

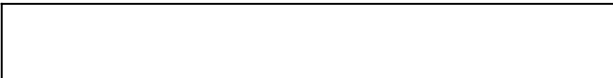
30/31 © EPODOC / EPO

PN - [CN2442790Y](#) Y 20010815
PR - CN1999254752U 19991203
AP - CN1999254752U 19991203
DT - I
PA - LI HAIQUAN [CN]

TI	- Quick convenient tool sharpener
AB	- The utility model relates to a quick and convenient cutter sharpener. Equipment used for grinding cutters is abrasive paper or sand cloth. The abrasive paper or the sand cloth is fixed on a soft belt or a hard plate or the surface of a circular roller, a grinded cutter is pressed on an abrasive surface in an inclined way, and the cutter is moved along the direction of a cutter back, or the abrasive surface is moved along the direction of a cutter edge. Under the pulling and grinding function of pressure and relative movement, the cutter can be grinded sharply from bluntness conveniently and rapidly.

31/31 © EPODOC / EPO

PN	- CN2191743Y Y 19950315
PR	- CN1994214602U 19940621
AP	- CN1994214602U 19940621
DT	- I
PA	- IRON & STEEL RES GENERAL INST [CN]
TI	- Improved miniature cutter grinder
AB	- The utility model relates to an improved miniature cutter grinder which is applicable for the cutter of a miniature mechanical device to carry out online repair, sharpen the cutter , etc. The utility model is composed of a metallic grinding head, a driving motor, a motor bracket, a motor base, etc. The utility model is characterized in that abrasive paper is adhered onto the outer wall of the metallic grinding head, and abrasive paper with various particle sizes can be



replaced conveniently. The utility model is provided with a grinding head tilting mechanism without a shaft. The convex surface of the motor bracket of the utility model and a motor groove are formed into a matching cylindrical cambered surface to realize self-stabilization without mechanically supporting. The utility model has the advantages of simple equipment and small volume, being convenient to replace the **abrasive paper** with various particle sizes. The utility model realizes progressively and refinedly **cutter** grinding and mirror grinding.

[SS 19] ..v

[EPODOC: SS 19]