

[SS 2] /ic B23B45/12 or B21D39/08 or B23B41/12 or B23Q3/00

Results in EPODOC 29.513

[SS 3] portable and boring

Results in EPODOC 626

[SS 4] 2 and 3

Results in EPODOC 26

[SS 5] ..li



- 1/26 © EPODOC / EPO
- PN - [CA2937509](#) A1 20160324
- PNFP - CA2937509 C 20170502
- PR - US201462050448P
20140915; WO2015IB57098
20150915
- AP - CA20152937509 20150915
- DT - I
- CCI - [B23B29/03439](#) ; [B23B29/03471](#)
- CCA - [B23B2270/58](#)
- PA - (A1 C)
USINAGE FILIATRAULT INC [CA]
- TI - (A1 C)
FACING ACCESSORY FOR
A **PORTABLE BORING APPARATUS**
- AB - (A1 C)
There is described a facing
accessory for a **portable boring**
apparatus, the accessory
comprising: a shaft mounting
portion for mounting to a
longitudinal shaft of
the **portable boring** apparatus
extending along a longitudinal
axis; a tool holder secured to the
shaft mounting portion and
adapted to receive a facing tool
thereon, the tool holder
comprising at least a telescopic
arm for enabling movement of

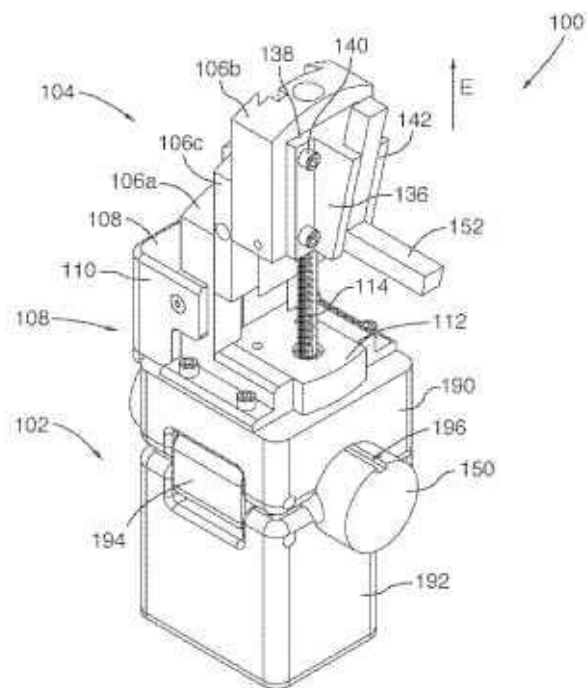
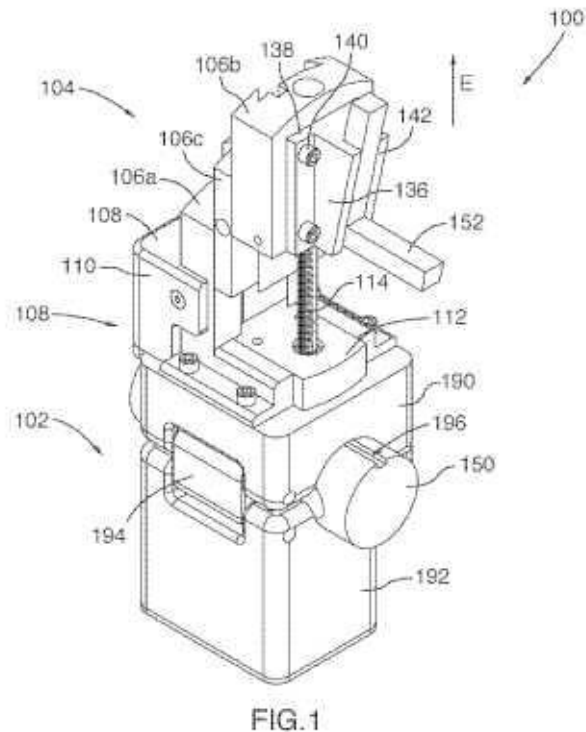


FIG.1

the facing tool towards and away from the shaft mounting portion along a radial axis relative to the longitudinal shaft; and an actuator operatively connected to the second section of the telescopic section for translating the second section relative to the first section along the radial axis.

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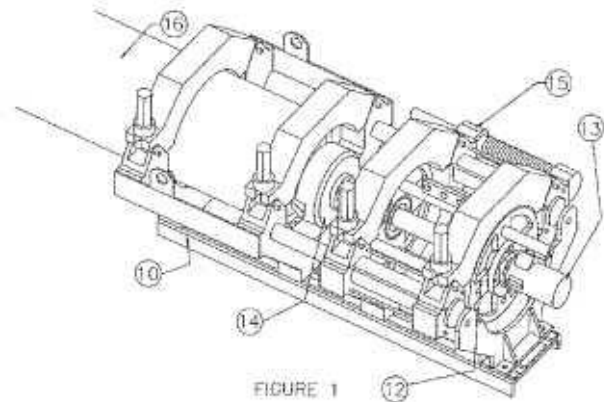
- PN - [WO2016042486](#) A1 20160324
- PR - US201462050448P 20140915
- AP - WO2015IB57098 20150915
- DT - *; Rep
- CT - |CA| ISR (A1)
[US5477597](#) A 19951226
 [A] (CATANIA MARK J [US], et al)
 [A] 1-34;
[US5439431](#) A 19950808
 [A] (HESBRUEGGEN NORBERT [DE], et al)
 [A] 1-34;
[US5293794](#) A 19940315
 [A] (MOSEY GEORGE N [US])
 [A] 1-34;
[US4944198](#) A 19900731
 [A] (NATALE MARIO [IT], et al)
 [A] 1-34;
[US4321746](#) A 19820330
 [A] (GRINAGE CLAUDE M)
 [A] 1-34;
[US4038740](#) A 19770802
 [A] (GRINAGE CLAUDE M)
 [A] 1-34
- CCI - [B23B29/03439](#) ; [B23B29/03471](#)
- CCA - [B23B2270/58](#)
- PA - USINAGE FILIATRAULT INC [CA]
- TI - FACING ACCESSORY FOR
 A **PORTABLE BORING APPARATUS**
- AB - There is described a facing accessory for a **portable boring** apparatus, the accessory comprising: a shaft mounting portion for mounting to a longitudinal shaft of



the **portable boring** apparatus extending along a longitudinal axis; a tool holder secured to the shaft mounting portion and adapted to receive a facing tool thereon, the tool holder comprising at least a telescopic arm for enabling movement of the facing tool towards and away from the shaft mounting portion along a radial axis relative to the longitudinal shaft; and an actuator operatively connected to the second section of the telescopic section for translating the second section relative to the first section along the radial axis.

3/26 © EPODOC / EPO

PN - [WO2015021492](#) A1 20150219
 PR - WO2013AU00908 20130816
 AP - WO2013AU00908 20130816
 DT - *; Rep
 CT - |AU| ISR (A1)
[GB1277461](#) A 19720614
 [A] (MOUNT WADSWORTH WALTON [US]);
[US2010126968](#) A1 20100527
 [A] (PAGE JUSTIN VAUGHN [CA]);
[US2008008549](#) A1 20080110
 [A] (SCHAWNE BERNARD EDWARD [US]);
[US4289430](#) A 19810915
 [A] (SHASHATY ALEX)
 CCI - [B23B41/006](#) ; [B23B51/103](#) ;
[B29C65/7802](#) ; [B29C65/7841](#) ;
[B29C66/02](#) ; [B29C66/02241](#) ;
[B29C66/5221](#) ; [B29C66/71](#) ;
[B29C66/7394](#) ; [B29C66/8414](#)
 CLC - [B29C66/71](#) , [B29K2023/06](#) , INV
 CCA - [B29C66/1142](#) ; [B29C66/348](#) ;
[B29C65/02](#) ; [B23B2215/72](#) ;
[B23B2226/61](#) ; [B29C2793/0081](#)
 PA - EMERY ENGINEERING PTY LTD [AU]
 TI - A **PORTABLE** POLY
 (POLYETHYLENE) PIPE BORER



AB - A **portable** polyethylene or poly pipe borer apparatus comprising a pipe borer having a rotary cutter adapted to be installed and removed from a pipe joining frame; the cutter adapted to be advanced against an open end of a first pipe in the frame wherein on **boring** the pipe, the borer is removed and a second pipe located in the frame to be joined to the first pipe. A method of use of the same.

4/26 © EPODOC / EPO

PN - [CN201089021Y](#) Y 20080723

PR - CN20072117497U 20071126

AP - CN20072117497U 20071126

DT - I

PA - HARBIN BRANDON PACKING TECHNOL [CN]

TI - **Portable boring** lathe

AB - The utility model provides a **portable boring** lathe, relating to a **boring** lathe. The utility model solves the problem that maintenance and processing on-site of large parts of a steam turboset are impossible at present. A first motor (2) is connected with a reducer (3) and the output shaft of the reducer (3) is fixedly provided with a first gear (4); the first gear (4) is meshed with a second gear (6) which is fixedly arranged on a shaft housing (5); the upper end and the lower end of the shaft housing (5) are fixedly provided with an upper end cover (7) and a blind (8) respectively; a first gear shaft (13) is meshed with a second gear shaft (14) and the shaft head end of the second gear shaft (14) is connected with a second motor (20) through a first shaft joint (15); the first gear shaft (13) is connected with a lower transmission rod (18) through a connecting sleeve (17); the lower transmission rod (18) is connected with a transversal feeding mechanism through a sliding sleeve (19); the transversal feeding mechanism is fixedly connected with a longitudinal feed mechanism; a longitudinal slider (28) is fixedly connected with the upper end cover (7) and is in sliding fit with the transversal feeding mechanism along the transverse direction. The utility model can process parts of the steam turboset on-site, shorten the processing cycle of the parts of the steam turboset, guarantee machining precision and save transport costs.

5/26 © EPODOC / EPO

PN - [WO2006091438](#) A1 20060831

PR - US20050066333 20050224

AP - WO2006US05220 20060215

DT - **

CT - || STSE (A1)
[US6447220](#) B1 20020910
[Y] (RICCI DONATO L [US]);
[US5183365](#) A 19930202 [A] (SILK
ENG DERBY LTD [GB]);
[US2040273](#) A 19360512
[A] (ROTTLER CLARENCE T)

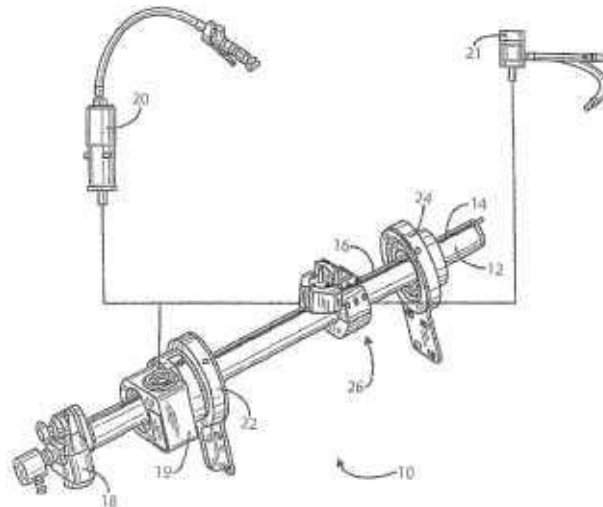
CCI - [B23B41/12](#) ; [B23B3/265](#) ;
[B23B29/02](#)

CCA - [Y10T82/12](#) ; [Y10T82/125](#) ;
[Y10T82/22](#) ; [Y10T408/558](#) ;
[Y10T408/5628](#) ; [Y10T408/68](#) ;
[Y10T408/8598](#)

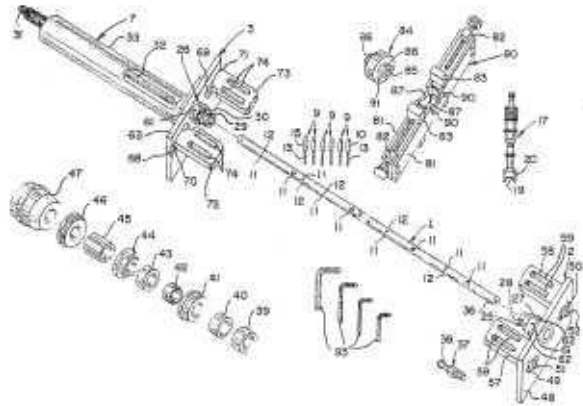
PA - RICCI DONATO L [US]

TI - RADIAL FEED FACING HEAD
FOR **BORING** BAR

AB - A **portable boring**/facing
machine using a single drive
motor (20/21) for rotating
a **boring** bar (12) and for either
axially translating a cutting
head assembly (26) along the
bar (12) using a lead screw (16)
or radially moving the blade of
the cutting head assembly (26)
using a radial feed screw (40).
The machine utilizing two
mounting brackets (22, 24) is
attachable to the workpiece for
alignment with the workpiece.



PN - [US4730958](#) A 19880315
 PR - US19850787670 19851015
 AP - US19850787670 19851015
 DT - *; Rep
 CT - || STSE (A)
[US1094187](#) A 19140421 [] (AUSTIN HERBERT [GB]);
[US1434004](#) A 19221031 [] (JOSEPH GREVEN);
[US1585026](#) A 19260518 [] (GREEN ANSEL T);
[US1752066](#) A 19300325 [] (COX MAURICE C, et al);
[US1836078](#) A 19311215 [] (LITTER FREDERICK A);
[US1885773](#) A 19321101 [] (SHOEMAKER HARRY C);
[US1939786](#) A 19331219 [] (MOOERS EDWARD P);
[US2066389](#) A 19370105 [] (BLAZEK JOHN Y, et al);
[US2108821](#) A 19380222 [] (JOHNSON JOHN R, et al);
[US2160476](#) A 19390530 [] (KAMPMEIER FREDERICK J);
[US2170054](#) A 19390822 [] (PAUL JESCHOR);
[US2204855](#) A 19400618 [] (HEALY FRANCIS P);
[US2204860](#) A 19400618 [] (JOHNSON CARL A);
[US2250788](#) A 19410729 [] (ARP EWALD A);
[US2604284](#) A 19520722 [] (ARP EWALD A);
[US2627193](#) A 19530203 [] (STATIA SR EDWIN V);
[US2651221](#) A 19530908 [] (FOSTER EDWARD A);
[US3345888](#) A 19671010 [] (GUSTKEY JOHN E);
[US4213721](#) A 19800722 [] (ALDRIDGE R WARREN JR [US]);
[US4451186](#) A 19840529 [] (PAYNE CHARLES L [US]);
[FR2431339](#) A1 19800215 []
 CCI - [B23B41/12](#)
 CCA - [Y10S408/708](#) ; [Y10T408/39](#) ;

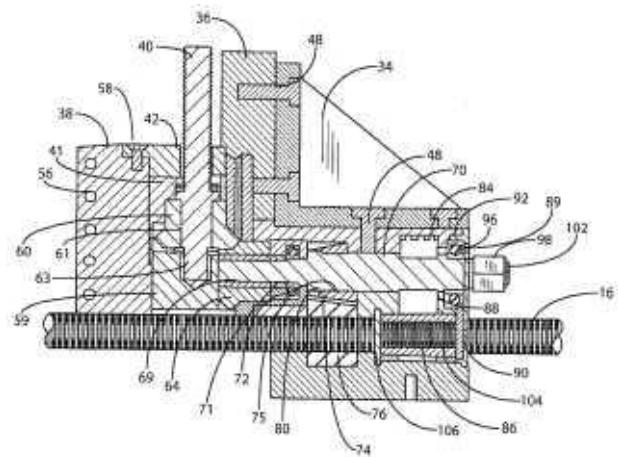


[Y10T408/553](#) ; [Y10T408/57](#)

- PA - BANOCZKY BELA [US]
- TI - Overhead cambearing line **boring** tool
- AB - A **portable** cambearing line **boring** tool for an internal combustion engine with an aluminum head or a cast iron block with aluminum caps and an overhead camshaft with non-replaceable bearings that are cast in as an integral part of the cylinder head which utilizes a cutting bar formed with blind openings for receiving spring loaded cutters. Centering of the cutting bar is by the use of locating bushings selected to fit a plurality of different cam-oil-seal and/or oil-plug openings at either end of the cylinder head. The bushings remain in place during the line **boring**. Horizontal alignment is by alignment ears secured to the upper valve cover gasket surface. For long heads a center bar support is provided. Rotation of the bar is by a **portable** hand held drill.

7/26 © EPODOC / EPO

- PN - [US2005155471](#) A1 20050721
- PNFP - US6990878 B2 20060131
- PR - US20040758627 20040115
- AP - US20040758627 20040115
- DT - **
- CT - || STSE (B2)
[US4573837](#) A 19860304 [] (FLATEN JAMES F [US])
[US4656898](#) A 19870414 [] (HUNT CHRISTOPHER C [US], et al)
[US4668133](#) A 19870526 [] (CAMPBELL IRA J [US], et al)
[US5030041](#) A 19910709 [] (MARRON GERALD I [US])
[US5642969](#) A 19970701 []



	] (STRAIT DAVID S [US]) US6447220 B1 20020910 [] (RICCI DONATO L [US], et al) US6705185 B2 20040316 [] (BRUGGEMANN BERNHARD [DE])
	- R141 (A1) US4573837 A []; US4652186 A []; US6705185 B2 []; US4656898 A []; US4668133 A []; US4932814 A []; US5030041 A []; US5642969 A []; US6447220 B1 []
CCI	- B23B41/12 ; B23B3/265 ; B23B29/02
CCA	- Y10T82/22 ; Y10T82/2512
PA	- (A1) DONATO L RICCI [US]
TI	- (A1 B2) Radial feed facing head for boring bar
AB	- (A1 B2) A portable boring/facing machine using a single drive motor for rotating a boring bar and for either axially translating a cutting head assembly along the bar or radially moving the blade of the cutting head assembly using a lead screw. The machine utilizing two mounting brackets is attachable to the workpiece for alignment with the workpiece.

PN - [US5785466](#) A 19980728

PR - US19960721284
19960926; CA19982227571
19980120

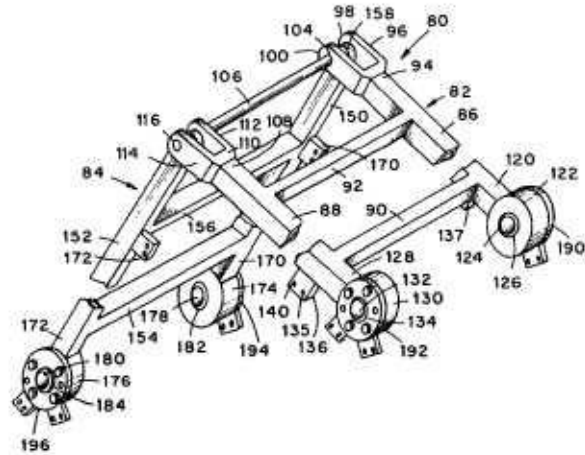
AP - US19960721284 19960926

DT - *; Rep

CT - || STSE (A)
[US2351243](#) A 19440613 [
] (JOHANNASVETTER);
[US2608113](#) A 19520826 [
] (ERNEST STANTON DUDLEY);
[US2834233](#) A 19580513 [
] (ANDERSON VYRON E);
[US3148562](#) A 19640915 [
] (MOSS THOMAS J);
[US3212366](#) A 19651019 [
] (RUSSELL FRED J, et al);
[US3674375](#) A 19720704 [
] (REED EVERETT E, et al);
[US3767316](#) A 19731023 [
] (DUMONT W);
[US3775857](#) A 19731204 [
] (HANDY H);
[US3973860](#) A 19760810 [
] (KERN WALTER J);
[US4040763](#) A 19770809 [
] (ASSENMACHER GERHARD);
[US4137003](#) A 19790130 [
] (BUDOFF JULES);
[US4346508](#) A 19820831 [
] (BAUMANN DAVID L, et al);
[US4451186](#) A 19840529 [
] (PAYNE CHARLES L [US]);
[US4753557](#) A 19880628 [
] (BESNIER BERTRAND [FR]);
[US4759666](#) A 19880726 [
] (GRAB JOSEPH A [US]);
[US4990037](#) A 19910205 [
] (STRAIT DAVID S [US]);
[US5209615](#) A 19930511 [
] (DAVIS CHARLES L [US]);
[US5308199](#) A 19940503 [
] (JUANG BOR-CHANG [TW])

CCI - [B23B41/12](#)

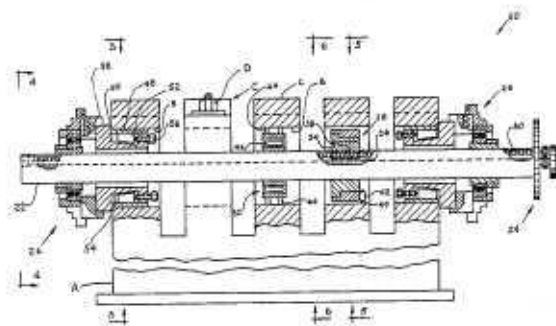
CCA - [Y10T408/558](#) ; [Y10T408/5583](#) ;
[Y10T408/56245](#) ; [Y10T408/563](#) ;
[Y10T408/567](#)



- TI - Tool for aligning a **portable boring** bar for re boring of a bore at a location relative to a further bore
- AB - A tool for aligning a **portable boring** bar for re boring of a bore at a location relative to a further bore including at least first and second "H"-shaped rigid guide members that are hingedly connected to permit their outboard ends to be selectively spaced apart. Each guide member includes first and second side members adapted to be disposed on opposite surfaces of an equipment component which is to be re bored, each side member for the first guide member having an outboard end designed to be aligned with a first bore, and each of the side members of the second guide member being designed to be aligned with a further bore spaced apart from the first bore. The tool serves as an alignment tool and/or as a mount for the drive unit of a **portable boring** bar.

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- PN - [US4652186](#) A 19870324
- PR - US19840671636 19841115
- AP - US19840671636 19841115
- DT - *; Rep
- CT - || STSE (A)
[US2000071](#) A 18780205 [];
[US744286](#) A 19031117 [] (BOARDMAN WILLIAM H [US]);
[US1217481](#) A 19170227 [] (MEWES RICHARD W [US]);
[US1376451](#) A 19210503 [] (TAFTPEIRCE MFG COMPANY);
[US1973386](#) A 19340911 [] (BETHLEHEM STEEL CORP);
[US2401838](#) A 19460611 []



] (AUTOMOTIVE MAINTENANCE
 MACH CO);
[US2638802](#) A 19530519 [
] (FROUSSARD ALBERT F);
[US2651221](#) A 19530908 [
] (FOSTER EDWARD A);
[US4451186](#) A 19840529 [
] (PAYNE CHARLES L);
[DE657766](#) C 19380312 [] (HILLE
 WERKE AKT GES);
[DE662285](#) C 19380709 [
] (LUDWIG HUNGER);
[GB191514939](#) A 19160928 [
] (KUEHNRICH PAUL RICHARD)

CCI - [B23B41/12](#)
 CCA - [Y10S408/708](#) ; [Y10T408/39](#) ;
[Y10T408/557](#) ; [Y10T408/5583](#) ;
[Y10T408/68](#)
 PA - SVERDLIN ANATOLY
 TI - **Portable boring** machine
 AB - A **portable boring** machine
 for **boring** bearing housings in
 situ includes a pair of spaced
 apart mounting members for
 adjustably positioning a **boring**
 bar within a row of bearing
 housings. The spaced apart
 mounting members are
 removably positionable on
 the **boring** bar and permit
 rotation of the **boring** bar with
 respect to the housings. The
 mounting members include
 radially adjustable jaws which
 enable the space between
 the **boring** bar and an adjacent
 bearing housing to be adjusted
 by the user in order to adjust the
 position of the **boring** bar within
 the housing and to vary the
 inclination of the **boring** bar with
 respect to the row of housings to
 be reconditioned. In this way the
 user has complete control
 between the relative positions of
 the **boring** bar and the bedplate.
 Moreover, since the support
 members are removably

positionable on the **boring** bar they may be adjusted in position with respect to the particular housing to be bored. A **boring** head, concentrically mounted about the **boring** bar, is rotated about the housings as the **boring** bar is rotated and is translated along the length of the **boring** bar by way of a rotatable screw mechanism contained within the **boring** bar. The **boring** head is secured about the **boring** bar by a split ring whose free ends may be fastened by a threaded fastener. The **boring** bar may be supported intermediately by an intermediate support that includes a plurality of radially outwardly extending, adjustable fingers. The **boring** bar and its screw may be rotated at different rates through a single motor and a geared planetary drive mechanism.

10/26 © EPODOC / EPO

PN - [US6447220](#) B1 20020910

PR - US20000610079 20000705

AP - US20000610079 20000705

DT - *; Rep

CT - || STSE (B1)

[US4580931](#) A 19860408 [] (US NAVY[US]);

[US4758121](#) A 19880719 [] (WESTINGHOUSE ELECTRIC CORP [US]);

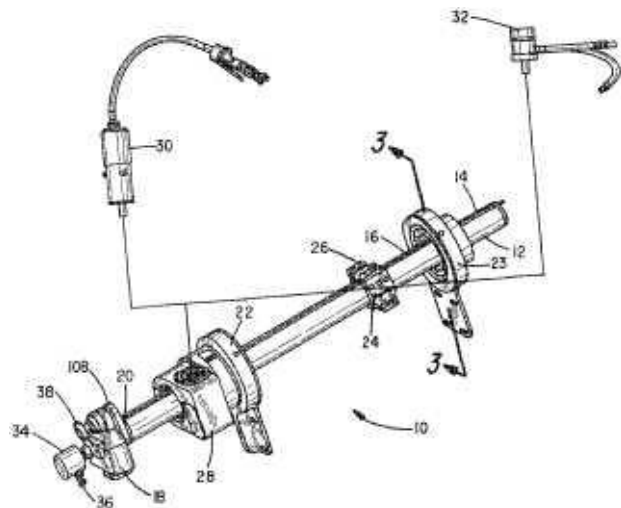
[US4850756](#) A 19890725 [] (DUBOIS GERALD J [CA]);

[US5030041](#) A 19910709 [] (WESTINGHOUSE ELECTRIC CORP [US]);

[US5050291](#) A 19910924 [] (GILMORE GUY T [US]);

[US5056389](#) A 19911015 [] (JOHNSTED PARK L [US]);

[US5642969](#) A 19970701 [] (CLIMAX PORTABLE MACHINE



TOOLS [US])

CCI - [B23B41/12](#) ; [B23B29/02](#)

CCA - [Y10S408/708](#) ; [Y10T82/125](#) ;
[Y10T82/22](#) ; [Y10T408/55](#) ;
[Y10T408/5628](#) ; [Y10T408/65](#) ;
[Y10T408/675](#)

PA - RICCI DONATO L [US]

TI - **Portable boring**/facing machine

AB - A **portable boring**/facing machine having a rotatable **boring** bar on which is supported a cutting head assembly that is adapted to be axially translated by a lead screw drive powered by an AC variable speed servo motor is provided with mounting brackets attachable to the work piece that incorporate a swivel mechanism for facilitating alignment of the **boring** bar with the centerline of the work piece.

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PN - [US4990037](#) A 19910205

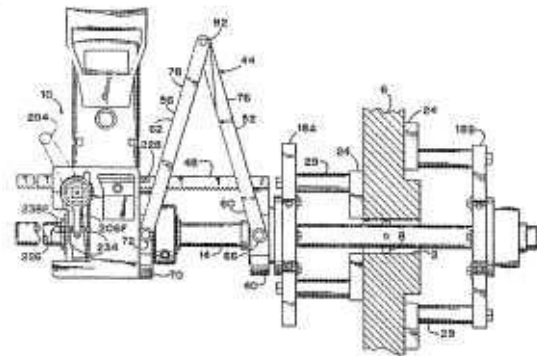
PR - US19890388985 19890802

AP - US19890388985 19890802

DT - **

CT - || STSE (A)
[US1794149](#) A 19310224 [] (ATLAS PRESS COMPANY);
[US1862866](#) A 19320614 [] (STORM MFG CO INC);
[US1899128](#) A 19330228 [] (JOHN D MILNE, et al);
[US2170054](#) A 19390822 [] (PAUL JESCHOR);
[US2963927](#) A 19601213 [] (BOEING CO);
[US4406566](#) A 19830927 [] (BAUER WOLFGANG [CA]);
[US4609311](#) A 19860902 [] (COMBUSTION ENG [US]);
[US4850756](#) A 19890725 [] (DUBOIS GERALD J [CA])

CCI - [B23B29/02](#) ; [B23Q9/0021](#)



- CCA - [Y10S408/708](#) ; [Y10T74/1515](#) ;
[Y10T74/18312](#) ; [Y10T74/18528](#) ;
[Y10T82/125](#) ; [Y10T408/55](#) ;
[Y10T408/675](#) ; [Y10T408/6779](#)
- PA - CLIMAX PORTABLE MACHINE
TOOLS [US]
- TI - **Portable boring** machine
- AB - A **boring** machine includes a power unit having a housing, a drive member for engaging a **boring** bar, and a motor for driving the drive member to rotate relative to the housing. The **boring** machine also includes a bearing assembly comprising an inner bearing member defining a passage through which the **boring** bar extends, and an outer bearing member in which the inner bearing member is fitted in a manner permitting angular movement of the inner bearing member relative to the outer bearing member about axes perpendicular to the axis of the passage defined by the inner bearing member. In use, the bearing assembly is attached to a workpiece in a manner preventing movement of the outer bearing member relative to the workpiece, and a collapsible torque transmission linkage connects the housing of the power unit to the outer bearing member, whereby the housing unit is held against rotation relative to the outer bearing member.

PN - [US4932814](#) A 19900612

PR - US19890384271 19890724

AP - US19890384271 19890724

DT - *; Rep

CT - || STSE (A)
[US920011](#) A 19090427 [
] (BOGGS THADDEUS M [US]);
[US1767384](#) A 19300624 [
] (LITTER FREDERICK A);
[US2683375](#) A 19540713 [
] (CONST ELECTRO MECANIKUES
 DE SA);
[US2810141](#) A 19571022 [
] (LANGSTON CHARLES H);
[US3075415](#) A 19630129 [
] (DABRINGHAUS GUSTAV H);
[US3512433](#) A 19700519 [
] (ZEPHYR MFG CO);
[US3583822](#) A 19710608 [
] (ROCKWELL MFG CO);
[US4197041](#) A 19800408 [
] (PREWITT FLOYD B);
[US4571795](#) A 19860225 [
] (SHIETS LEO C);
[US4582105](#) A 19860415 [
] (WOLFF ROBERT [DE]);
[US4701081](#) A 19871020 [
] (HONDA MOTOR CO LTD [JP])

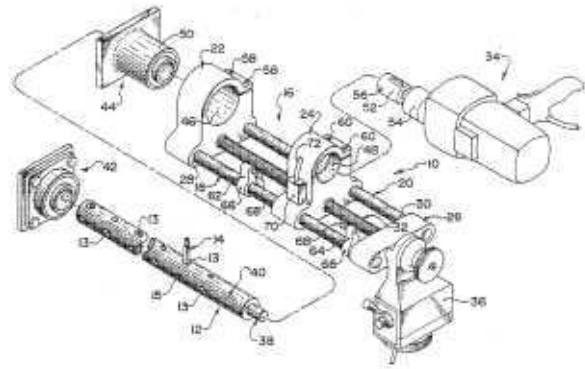
CCI - [B23B41/12](#) ; [B23B29/02](#)

CCA - [Y10S408/705](#) ; [Y10T29/5108](#) ;
[Y10T408/03](#) ; [Y10T408/5647](#) ;
[Y10T408/68](#)

PA - YORK RONALD A [CA]

TI - **Portable** line **boring** machine

AB - A **portable** line **boring** machine
 has a rotatable **boring** bar on
 which a tool bit is mountable. A
 first drive mechanism rotatably
 drives one end of the **boring** bar.
 A second drive mechanism
 linearly drives the first drive
 means and the **boring** bar along
 the longitudinal axis of
 the **boring** bar. A frame supports
 the first drive means, the second
 drive means and the **boring** bar.



13/26 © EPODOC / EPO

PN - [US3764204](#) A 19731009

PR - US19710200492 19711119

AP - USD3764204 19711119

DT - *; Rep

CT - || STSE (A)
[US3674375](#) A 19720704 [
] (UNITED TOOL PROCESSES
 CORP);
[US3157068](#) A 19641117 [] (HALL
 TOLEDO INC)

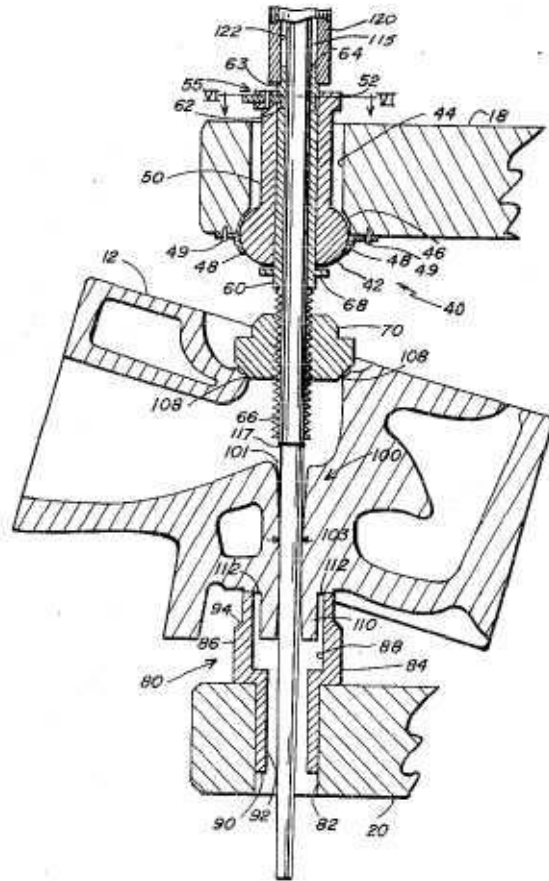
CCI - [B23C3/055](#)

CCA - [B23C2215/60](#) ; [Y10S408/709](#) ;
[Y10T408/553](#) ; [Y10T408/5621](#) ;
[Y10T408/56245](#) ; [Y10T408/563](#)

PA - K LINE IND INC

TI - VALVE GUIDE BORING FIXTURE

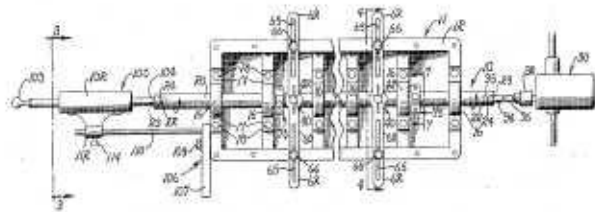
AB - A **portable**, U-shaped valve guide **boring** fixture to be mounted on and supported by a cylinder head for an internal combustion engine in order to guide the reworking of the valve guides in said internal combustion engine. The fixture comprises a support post on which are mounted two guide arms normal to the axis of said post. The second arm is fixedly mounted at one end of the post and includes spring seat engaging means. The first guide arm is slideably mounted and spring biased toward the second guide arm intermediate the ends of said post and includes valve seat engaging means comprising a pivotally mounted ball swivel guide having an axial bore to guide said reworking operation. The fixture is clamped over the spring seat and valve seat on the cylinder head, and a tapered alignment pin is inserted through said engaging means and said valve guide to bring the fixture into axial alignment with



the valve guide by means of the pivotal action of the ball swivel guide. The fixture is then tightened into said aligned position and may be used to guide the **boring** and reaming operations, accomplished by means of hand tools, resulting in a reworked valve guide in accurate axial alignment with said valve seat.

14/26 © EPODOC / EPO

- PN - [US3751175](#) A 19730807
- PR - US19700087178 19701105
- AP - USD3751175 19701105
- DT - **
- CT - || STSE (A)
[US2651221](#) A 19530908 [] (FOSTER EDWARD A);
[US2416402](#) A 19470225 [] (AMMCO TOOLS INC);
[US2413574](#) A 19461231 [] (AUTOMOTIVE MAINTENANCE MACH CO);
[US2401838](#) A 19460611 [] (AUTOMOTIVE MAINTENANCE MACH CO);
[US1748876](#) A 19300225 [] (GREEN ANSELT);
[GB191119181](#) A 19120711 [] (DAVIDSON JOHN, et al);
[GB985173](#) A 19650303 [] (STEN BERTIL HANSSON)
- CCI - [B23B41/12](#)
- CCA - [Y10T408/55](#) ; [Y10T408/558](#)
- PA - PORTA TOOL INC
- TI - **PORTABLE LINE BORING BAR ASSEMBLY**
- AB - A **portable** line **boring** bar assembly for in-line **boring** the main bearing bores of an engine block for re-establishing their precise concentricity and axial alignment longitudinally of such a block providing an elongated **boring** bar for



extension longitudinally through the bores of the block having centering means slidably mounted on the bar for temporary wedging engagement in selected bores of the block precisely to center the bar relative to the bores with bar support means releasably mounted on the block in spaced relation to the bores to hold the bar in said centered position during powered rotation and axial feeding movement of the bar in the block and including pre-set bore cutting means adapted to be releasably mounted in any desired location along the **boring** bar adjacent to said bores in the block. The assembly is readily **portable** and suitable for "in the field" utilization.

15/26 © EPODOC / EPO

- PN - [WO9101837](#) A1 19910221
- PR - US19890388985 19890802
- AP - WO1990US03948 19900713
- DT - *; Rep
- CT - |US| ISR (A1)
[US4406566](#) A [X];
[US4850756](#) A [X];
[US1794149](#) A [A];
[US1862866](#) A [A];
[US1899128](#) A [A];
[US2170054](#) A [A];
[US2963927](#) A [A];
[US4609311](#) A [A]
- CCI - [B23B29/02](#) ; [B23Q9/0021](#)
- CCA - [Y10S408/708](#) ; [Y10T74/1515](#) ; [Y10T74/18312](#) ; [Y10T74/18528](#) ; [Y10T82/125](#) ;
[Y10T408/55](#) ; [Y10T408/675](#) ; [Y10T408/6779](#)
- PA - CLIMAX PORTABLE MACHINE TOOLS [US]
- TI - **PORTABLE BORING MACHINE**

16/26 © EPODOC / EPO

PN - [US2005155470](#) A1 20050721

PNFP - US7069829 B2 20060704

PR - US20050066333
20050224; US20040758627
20040115

AP - US20050066333 20050224

DT - *; Rep

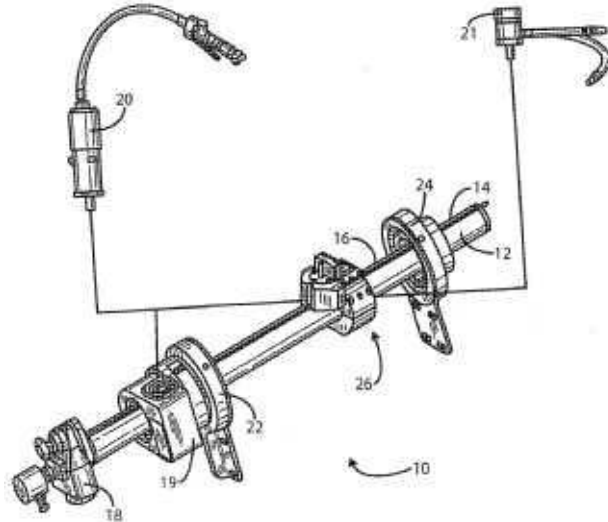
CT - || STSE (B2)
[US2040273](#) A 19360512 [
] (ROTTLER CLARENCE T)
[US5183365](#) A 19930202 [] (SILK
GEORGE [GB])
- || R141 (A1)
[US5183365](#) A [];
[US4573837](#) A [];
[US4652186](#) A [];
[US6705185](#) B2 [];
[US4656898](#) A [];
[US2040273](#) A [];
[US4668133](#) A [];
[US4932814](#) A [];
[US5030041](#) A [];
[US5642969](#) A [];
[US6447220](#) B1 []

CCI - [B23B41/12](#) ; [B23B3/265](#) ;
[B23B29/02](#)

CCA - [Y10T82/12](#) ; [Y10T82/125](#) ;
[Y10T82/22](#) ; [Y10T408/558](#) ;
[Y10T408/5628](#) ; [Y10T408/68](#) ;
[Y10T408/8598](#)

TI - (A1 B2)
Radial feed facing head
for **boring** bar

AB - (A1 B2)
A **portable boring/facing**
machine using a single drive
motor for rotating a **boring** bar
and for either axially translating
a cutting head assembly along
the bar or radially moving the
blade of the cutting head
assembly using a lead screw. The
machine utilizing two mounting
brackets is attachable to the
workpiece for alignment with the
workpiece.



17/26 © EPODOC / EPO

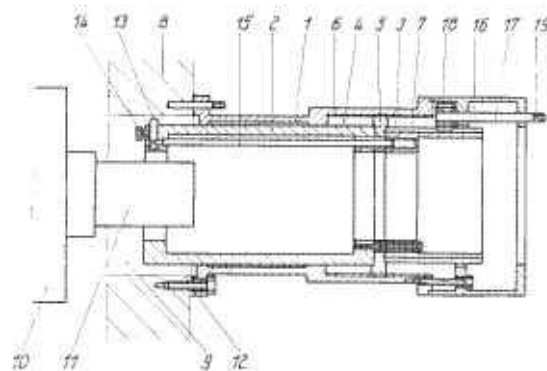
PN - [RU2086363](#) C1 19970810
PR - RU19930041441 19930818
AP - RU19930041441 19930818
DT - I
PA - LE ATOMNAYA ELEKTROSTANTSIIA I [SU]
TI - **PORTABLE BORING MACHINE**

18/26 © EPODOC / EPO

PN - [EP0485477](#) A1 19920520
PNFP - EP0485477 A4 19921202
PR - US19890388985 19890802
AP - EP19900912268 19900713
DT - I
CT - || STSE (A4)
[US4850756](#) A 19890725 [Y] (DUBOIS GERALD J [CA]);
[GB2023029](#) A 19791228 [Y] (BOSCH GMBH ROBERT)
CCI - [B23B29/02](#) ; [B23Q9/0021](#)
CCA - [Y10S408/708](#) ; [Y10T74/1515](#) ; [Y10T74/18312](#) ; [Y10T74/18528](#) ; [Y10T82/125](#) ;
[Y10T408/55](#) ; [Y10T408/675](#) ; [Y10T408/6779](#)
PA - (A1)
CLIMAX PORTABLE MACHINE TOOLS [US]
TI - (A1)
PORTABLE BORING MACHINE.
(A4)
PORTABLE BORING MACHINE

19/26 © EPODOC / EPO

PN - [DE4102975](#) A1 19920806
PNFP - DE4102975 C2 19930909
PR - DE19914102975 19910201
AP - DE19914102975 19910201
DT - *
CT - (A1)
[DE3329537](#) A1 []; [DD255436](#) A3
[]
CCI - [B23B29/02](#)
PA - (A1)
ROLAND MAN DRUCKMASCH [DE]
TI - (A1)
Portable rig for **boring-out**
printing press housing - has
hollow spindle feeding into bore



over cylinder journal end and driven by **portable** drill

AB - (A1)
 The hollow spindle (2,3) of the machining rig rotates and slides in a cylindrical housing (1) with a flange (12) at one end to secure the rig onto the machine frame (8) in alignment with the bearing sleeve bore (9) of the cylinder (10). The journal (11) can protrude into the open end of the rig spindle. A collar (5) towards the rear of the spindle has an outside thread engaging the internal thread (6) in the housing. The rear section of the spindle has gear teeth (16) engaging a pinion (18) on a drive shaft (17) which can be driven by a **portable** power drill simultaneously to rotate the spindle and feed it into and out of the bore. Projecting from the nose end of the spindle is a toolbit (13) which can be wedged outwards for adjustment by screwing rod (15) forwards in its threaded seating at the rear of the spindle. ADVANTAGE - Simple, low-cost and compact design. Housing can be machined out without removing cylinder. Easy to handle and use.

20/26 © EPODOC / EPO

PN - [DE3329537](#) A1 19850228

PR - DE19833329537 19830816

AP - DE19833329537 19830816

DT - *

CCI - [B23B35/00](#)

PA - KAELEBLE GMBH C [DE]

TI - **Portable boring** device for machining bores

AB - The present invention relates to a **portable boring** device for machining existing and worn-out bores, in particular on construction machines and lifting appliances, in which **boring** device a tool-holding sleeve displaceable in the axial direction, after the **boring** tool is moved up to the bore to be machined, is clamped by means of an

annular-clamping-disc block in a driven hollow spindle for driving by the latter, a longer machining area being made possible without shifting the **boring** device in the case of several bores lying one behind the other on the same axis.

21/26 © EPODOC / EPO

PN - [CN101161386](#) A 20080416

PNFP - CN100534680C 20090902

PR - CN20071144674 20071126

AP - CN20071144674 20071126

DT - I

PA - (A C)
HAERBIN BULAI DENG TECHNOLOGY A [CN]

TI - (A C)
Portable boring mill

AB - (A)
A **portable boring** mill relates to a **boring** mill which can settle the problem that the large-scale element of the turboset can not be done with on-site maintenance and machining currently. A first electric motor (2) is connected with the speed reducer (3) which is fixed with a first gear (4) on the output shaft, the first gear (4) is engaged with a second gear (6) which is fixed at the axle sleeve (5), the upper and lower ends of the axle sleeve (5) are respectively fixed with an upper end cover (7) and a blocking board (8), a first gear shaft (13) is engaged with a second gear shaft and the spindle nose end of the second gear shaft (14) is connected with the second electric motor (20) with a first coupling (15), the first gear shaft (13) is connected with the lower transmission rod (18) with the jointing sleeve (17) and the lower transmission rod (18) is connected with a transverse feed mechanism with a sliding bush (19), the transverse feed mechanism is fixedly connected with a longitudinal feed mechanism which is fixedly connected with the upper end cover (7), and the longitudinal slide (28) is conjunct with the transverse feed mechanism along lateral sliding. The present invention has the advantages of doing on-site machining to the element of the turboset, shorting the process-cycle of the element of the turboset, ensuring the working accuracy and saving the transport costs.

22/26 © EPODOC / EPO

PN - [CN2710807Y](#) Y 20050720

PR - CN2004219048U 20040602

AP - CN2004219048U 20040602

DT - I

PA - HARBIN TURBINE PLANT CO LTD [CN]

TI - On-line **boring** mill for cylinder of steam turbine

AB - The utility model discloses a **portable boring** machine-an on-line **boring** machine for the cylinder of the steam turbine, comprising a machine frame (1), a front shaft bush (2), a rear shaft bush (3), a power head (4), a transmission pair (5), a main shaft (6), a cutter disk (7), an axial feeding mechanism, a small blade carrier (9), and a **boring** cutter (10). The power head (4) is arranged on the machine frame (1); one end of the transmission pair (5) is connected with the output end of the power head (4), and the other end of the

transmission pair (5) which is connected with the main shaft (6) can transfer the motive power to the main shaft (6); the end portion of the main shaft (6) is connected with the machine frame (1) so as to complete the axial location; the front shaft bush (2) and the rear shaft bush (3) are respectively sheathed on the surface of the external circle on the two end portions of the main shaft (6); the cutter disk (7) which can slide on the cylindrical surface of the main shaft (6) can complete the key joint with the main shaft (6) pass key (11); the small blade carrier (9) is fixed onto the surface of the disk body of the cutter disk (7), and the **boring** cutter (10) is fixed onto the small blade carrier (9). Since the location of the main shaft (6) can be completed through making use of the existing bearing seat of the steam turbine; the enormous machine body of the traditional **boring** machine can be omitted; and accordingly, the **portable boring** machine-the on-line **boring** machine for the cylinder of the steam turbine is very convenient to be transported, and the problem of the cylinder with difficult reform can be completely solved.

23/26 © EPODOC / EPO

PN - [CN2033313U](#) U 19890301

PR - CN1988207404U 19880601

AP - CN1988207404U 19880601

DT - I

PA - ZHAO HESHENG [CN]

TI - **BORING** AND MILLING MACHINE WITH UNIVERSAL SPIRACLE BASE

AB - The utility model relates to a **boring** and milling device of an engine valve base. A common special **portable boring** and milling device can complete the **boring** and milling operation to the engine valve base of a car, a tractor, etc., yet is only suitable under the circumstance that a valve base and a cylinder cover are arranged vertically, which is inconvenient for repair work. The utility model can drive a driving member of a **boring** and milling cutter holder, and the driving member is supported on a vertical swivel plate and a horizontal swivel plate. By means of the mutual regulation of the two swivel plates in the plane orientation and the vertical orientation of the cylinder cover respectively, the utility model can realize the centering **boring** and milling operation in any orientation in the three-dimensional space.

24/26 © EPODOC / EPO

PN - [CA2227571](#) A1 19990720

PNFP - CA2227571 C 20080527

PR - CA19982227571
19980120; US19960721284
19960926

AP - CA19982227571 19980120

DT - **

CCI - [B23B41/12](#)

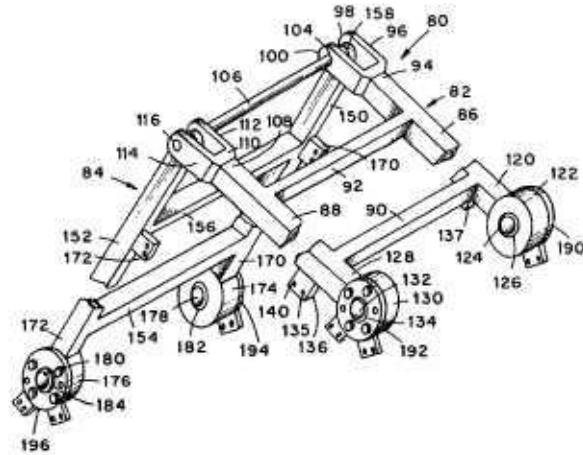
CCA - [Y10T408/558](#) ; [Y10T408/5583](#) ;
[Y10T408/56245](#) ; [Y10T408/563](#) ;
[Y10T408/567](#)

PA - (A1 C)
HAYNES GEORGE C [US]

TI - (A1 C)
TOOL FOR ALIGNING A **PORTABLE BORING BAR** FOR REBORING OF A BORE AT A LOCATION RELATIVE TO A FURTHER BORE

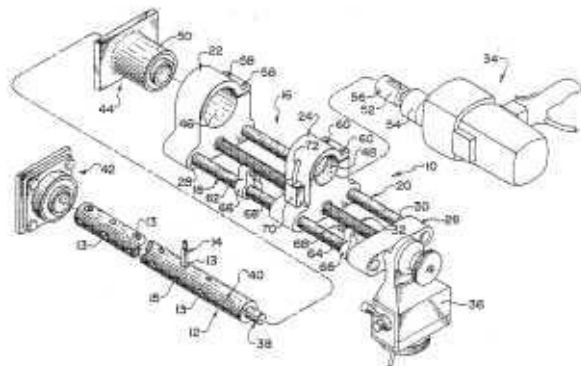
AB - (A1)
A tool for aligning a **portable** boring bar for reboring of a bore at a location relative to a further bore including at least first and second "H"-shaped rigid guide members that are hingedly connected to permit their outboard ends to be selectively spaced apart. Each guide member includes first and second side members adapted to be disposed on opposite surfaces of an equipment component which is to be rebored, each side member for the first guide member having an outboard end designed to be aligned with a first bore, and each of the side members of the second guide member being designed to be aligned with a further bore spaced apart from the first bore. The tool serves as an alignment tool and/or as a mount for the drive unit of a **portable boring bar**.

- (C)
A tool for aligning a **portable**



boring bar for reboring of a bore at a location relative to a further bore including at least first and second "H"-shaped rigid guide members that are hingedly connected to permit their outboard ends to be selectively spaced apart. Each guide member includes first and second side members adapted to be disposed on opposite surfaces of an equipment component which is to be rebored, each side member for the first guide member having an outboard end designed to be aligned with a first bore, and each of the side members of the second guide member being designed to be aligned with a further bore spaced apart from the first bore. The tool serves as an alignment tool and/or as a mount for the drive unit of a **portable boring** bar.

- 25/26 © EPODOC / EPO
- PN - [CA1326145](#) C 19940118
- PR - US19890384271 19890724
- AP - CA19890613096 19890926
- DT - I
- CCI - [B23B41/12](#) ; [B23B29/02](#)
- CCA - [Y10S408/705](#) ; [Y10T29/5108](#) ; [Y10T408/03](#) ; [Y10T408/5647](#) ; [Y10T408/68](#)
- PA - CAMBREY DENNIS D [CA]
- TI - **PORTABLE LINE BORING MACHINE**
- AB - **PORTABLE LINE BORING MACHINE**
 A **portable** line **boring** machine has a rotatable **boring** bar on which a tool bit is mountable. A first drive mechanism rotatably drives one end of the **boring** bar. A second drive mechanism linearly drives the first drive means and the **boring** bar along the longitudinal axis of



the **boring** bar. A frame supports the first drive means, the second drive means and the **boring** bar.

26/26 © EPODOC / EPO

PN - [EP1767294](#) A1 20070328

PNFP - EP1767294 B1 20080521

PR - EP20050020530 20050921

AP - EP20050020530 20050921

DT - *; Rep

CT - || STSE (A1)

[US4652186](#) A 19870324

[A] (SVERDLIN ANATOLY [US])

[A] 1-3

* the whole document *;

[US5030041](#) A 19910709

[A] (MARRON GERALD I [US])

[A] 1

* the whole document *;

[US6447220](#) B1 20020910

[A] (RICCI DONATO L [US], et al)

[A] 1

* the whole document *

CCI - [B23B41/12](#) ; [B23B29/02](#)

PA - (A1 B1)

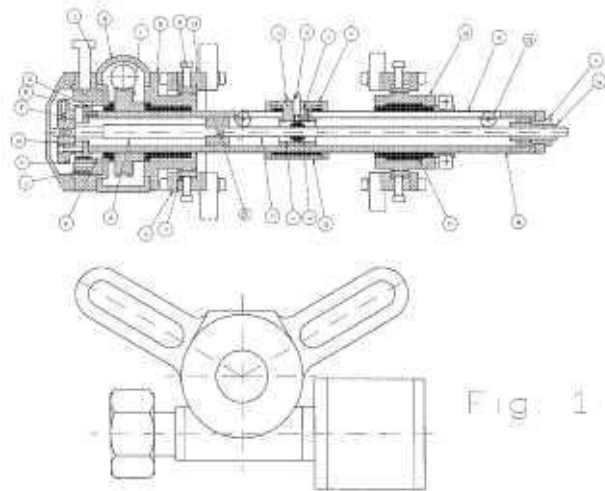
DE ANGELIS GIUSEPPE [IT]

TI - (A1 B1)

Portable boring bar with continuous motion of the tool on the main bar through differential motion device

AB - (A1)

Single-motored, compact, multipurpose instrument for accurate reaming. The instrument is composed of a **boring** bar which is held in its position by two balancing supports. The first support contains both the driving head of the **boring** bar and the device for the differential movement of the tool. The second support has the function of positioning the bar. The instrument can be applied for the on site activity of reaming couplings for shafts and



flywheels in thermal powerplants, oil refineries, shipyards, paper mills, chemical factories and steel mills. The tool carrier slides through the inside of a slot which is machined on the **boring** bar. The movement of the tool carrier is continuous and composed of two gears (Fig. 1 (A) and (B)) having the same pitch diameter as each other, but having a number of teeth which differs by one unit. Both (Fig. 1 (A)) and (Fig. 1 (B)) mesh with another gear which, by rolling around the gear (Fig. 1 (A)), makes the gear (Fig. 1 (B)) rotate with the same number of rotations minus one tooth. The differential motion is transferred on to the nut screw which is made to rotate of a certain angle, so the tool carrier makes a linear movement. The same idea works if one uses the spindle of another tooling machine as a motorization.

[SS 5] ..v

[EPODOC: SS 5]