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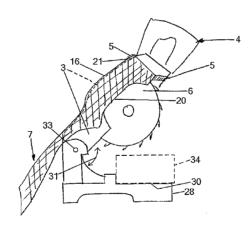
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(54) Title: IMPROVEMENTS RELATING TO MACHINE TOOLS, E.G. A SLIDING COMPOUND MITRE SAW



(57) Abstract: A machine tool (10), e.g. a sliding compound mitre saw, comprises a mount (3) for a rotary machining member (6) (a saw blade) and a motor (not shown separately) in a housing 1 carried laterally by and extending from the mount (3), the motor being connected for rotating the member (6) and the mount (3) having handle means (4) to move the mount (3). An accessory (12) for the machine tool (10) comprises a cover (12) having a main wet weather-protective part (14) of waterproof material of sheet-like form cupped to fit over, and fasten around, the motor housing (1) and anchor means (5) to anchor the cover (12) to the mount (3) or housing (1). The anchor means (5) comprises an elongate part (5) connected at one end (55) to the rest of the cover (12) and is fastenable at the other end (56) with part of an adjustable fastening (21, 21) to provide a loop (5) that can loop around said mount (3) and thereby anchor said cover (12) to said mount (3). Said waterproof material is able to breathe and comprises canvas, e.g. nylon or acrylic material, and the cover (12) is brightly coloured. Said cover (12) comprises a second wet weather-protective part (16) cupped to fit over said mount (3), and further comprises a trailing wet weather-protective apron (7) to cover a part (24) of the mount (3) that is slidably extensible (in the direction of arrow (26), by pulling on handle means (4), to extend a cut across a workpiece (34).

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Title: "Improvements relating to Machine Tools, e.g. a Sliding Compound Mitre Saw"

FIELD OF THE INVENTION

This invention relates to machine tools, e.g. a sliding compound mitre saw.

BACKGROUND

A carpenter often uses outdoors a sliding compound mitre saw, sometimes colloquially known as a chop-saw. This has an electric motor and thus is not suitable for outdoor use in wet weather. However, the carpenter will often want to continue working in wet weather, particularly if a job is urgent, except in the heaviest of downpours.

The electric compound mitre saw is perhaps the most common and most frequently used power tool available to the working carpenter. This tool is of particular use when constructing roofs or when second-fixing properties, the former obviously being performed outdoors and whilst doing the latter the machine will often be set up outdoors to avoid dust contamination especially when cutting MDF.

As the tool is electric it is susceptible to damage from wet weather. Rain does not always make it impossible for a carpenter or team of carpenters to work outdoors; indeed, only the heaviest downpours would stop work on a job that has to meet a schedule. Keeping electrical tools dry is however a problem.

15 THE INVENTION

According to one aspect of the invention, there is provided a machine tool accessory as claimed in claim 1. According to another aspect of the invention, there is provided a combination of machine tool and accessory as claimed in claim 35. According to another aspect of the invention, there is provided a method of covering or using a machine tool as claimed in claim 69.

20 Preferred features are as claimed in any one of claims 2 to 32, 36 to 66 and 70 to 73.

The aforementioned can be overcome by means of a simple one-piece wet weather cover as exemplified in the embodiments hereinafter described and illustrated as used with an electric sliding compound mitre saw, e.g. that known as model DW707LX obtainable from DeWalt. Similar embodiments can be used with the power-operated mitre saw exemplified in US Patent Application Publication US2002/0088327. The cover may be made of canvas, e.g. that supplied as 'acrylic canvas' by The Protective Textile Co Ltd of Canvas Works, Cox Lane, Chessington, Surrey KT9 1SG, UK.

DESCRIPTION RELATING TO THE DRAWINGS

Reference will now be made by way of example to the accompanying drawings, in which:

Figure 1 is a plan view of a wet weather cover embodying the invention, schematically opened out, e.g. before being stitched together,

Figure 1A is a plan view of the Figure 1 cover as actually used, e.g. when stitched together,

Figure 2 is a front view of a sliding compound mitre saw with the Figure 2 cover in place;

Figure 3 is a plan view of the Figure 2 combination saw and in-place cover; and

Figures 4 and 5 are side elevations from opposite sides of the Figure 2 combination saw and in-place cover.

Referring to the drawings, a machine tool 10 comprises a mount 3 for a rotary machining member 6 (a saw blade) and a motor (not shown separately) in a housing 1 carried laterally by and extending from the mount 3, the motor being connected for rotating the member 6 and the mount 3 having handle means 4 to move the mount 3. An accessory 12 for the machine tool 10 comprises a cover 12 having a main wet weather-protective part 14 of waterproof material adapted to fit over the motor housing 1 and anchor means 5 to anchor the cover 12 to the mount 3 or housing 1. Said main part 14 has adjustable fastening means 2, 2 to fasten it together around the housing 1. Said anchor means 5 is adjustable and comprises an adjustable fastening 21, 21 to fasten it to the rest of the cover 12. Both said fastening means 2, 2 for said main part 14 and said fastening 21, 21 of said anchor means 5 comprises an elongate part 5 connected at one end 55 to the rest of the cover 12 and is fastenable at the other end 56 with part of said fastening 21, 21 by means of which it is fastenable to the rest of the cover 12 to provide a loop 5 that can loop around said mount 3 and thereby anchor said cover 12 to said mount 3.

Said waterproof material is of a kind that is able to breathe and comprises canvas, e.g. nylon or acrylic material, and the cover 12 is brightly coloured.

Said cover 12 comprises a second wet weather-protective part 16 to fit over said mount 3. Said second part 16 is cupped to help it fit over said mount 3 and has an edge 18, remote from said main part 14 that is recessed at recess 20 to allow better visibility of said rotary member 6. Also, said main part 14 is cupped to help it fit around said housing 1.

The cover 12 further comprises a trailing wet weather-protective apron 7 to cover a part 24 of the mount 3 that is slidably extensible (in the direction of arrow 26, by pulling on handle means 4, to extend a cut across a workpiece 34).

The cover 12 is shaped and adapted for said housing 1 to extend laterally from said mount 3 in a direction parallel to the axis of rotation of said member 6, e.g. by virtue of said main part 14 extending laterally from said second part 16.

The cover 12 is also shaped and adapted for said mount 3 to be movable angularly, e.g. pivotally about a pivot 33, by said handle means 4 in a direction 31 in the plane of rotation of said member 6, e.g. by virtue of being adapted to be fastened to and carried by said housing 1 and mount 3.

The cover 12 is also shaped and adapted for said mount 3 to be movable linearly and/or extensibly by said handle means 4 in a direction 26 in the plane of rotation of said member 6, e.g. by virtue of being adapted to be fastened to and carried by said housing 1 and mount 3 and having said trailing wet weather-protective apron 7 to cover part 24 of the mount 3 that is slidably extensible.

The cover 12 is also shaped and adapted for said mount 3 to be rotatable by said handle means 4 to change the direction of the plane of rotation of said rotary machining member 6 about a pivot 32, e.g. by virtue of being adapted to be fastened to and carried by said housing 1 and mount 3.

The cover 12 is also shaped and adapted for said machine tool 10 to be a rotary saw 10, e.g. by virtue of said second part 16 being cupped and sized to help it fit over said mount 3 when this is a head 3 adapted to carry a circular saw blade 6. The cover 12 is further shaped and adapted for said machine tool 10 to be a mitre saw 10, e.g. by virtue of being adapted to be fastened to and carried by said housing 1 and mount 3 as this rotates about pivot 32, and is yet

further shaped and adapted for said machine tool 10 to be a sliding compound mitre saw 10, e.g. by virtue yet additionally of having said trailing wet weather-protective apron 7 to cover part 24 of the mount 3 that is slidably extensible. The cover 12 is also shaped and adapted for said machine tool 10 to be a sliding compound mitre saw 10 of saw diameter 210mm to 250mm, or of saw diameter 305mm, e.g. by virtue additionally of its size.

5 The cover 12 is a one-piece cover 12.

The machine tool 10 and cover 12 can be provided as a combination 10, 12.

The machine tool 10 is a compound sliding mitre saw 10, Figure 5, that comprises a base 28 having an upwards-facing turntable 30 on which is mounted mount 3 by means of a pivot 32 (to set a mitre angle), and blade 6 carried by mount 3 can be angularly moved in the direction 31 in its plane of rotation by handle means 4 to engage a workpiece 34 positioned on base 30. Blade 6 while engaging workpiece 34 can be drawn across the latter by pulling handle means 4 to extend mount 3 by means of its extensible part 24. Part 24 also includes pivot means (not shown) whose axis of pivoting is perpendicular to the axis of rotation of blade 6 whereby rotation of the latter about said pivoting axis can be effected by twisting handle means 4 (and, with it, mount 3) and set in this position to produce a mitre cut angled to the vertical.

In a method of covering machine tool 10, there is used a combination 10, 12 as described above, and the cover 12 is placed on the tool 10 to protect it, e.g. from rain. In a method of using machine tool 10, there is used such a method of covering the machine tool 10. The cover 12 is partly secured to the tool 10 by fastening one (the main) part 14 of the cover 12 together around one part (the housing) 1 of the tool 10, and is partly secured to the tool 10 by fastening an elongate part 5 of the cover 12 around a mount 3 of the tool 10, more particularly around handle means 4 of said mount 3 of the tool 10. The machine tool 10 can then be set up and used, as just described, in wet weather.

The cover 12 is shaped to enclose the motor 11 and housing 1 and is secured beneath the motor 11 and housing 1 by way of Velcro 2. The cover 12 blankets the main body (mount) 3 up to the handle 4 where a strip of webbing 5 wraps around the handle mechanism 4 and is secured using Velcro. It takes a matter of only seconds to secure the cover 12 and seconds to remove it. The hard-wearing material of which the cover 12 is made allows it to be simply cast aside or thrown into a tool box or bag or into the back of a van or truck.

The wet weather cover 12 is made from a breathable waterproof and brightly coloured acrylic (or nylon) canvas material. The fact of its being canvas allows it to breathe, and being acrylic or nylon makes it hard-wearing. The bright colour makes it easy to find in even the dingiest of vehicles or tool boxes. The design allows the cover to be used when the saw is in use and the recess shape 20 around the blade 6 allows the user to see clearly whatever workpiece 34 may be being cut and any marks that need to be worked to. The tail 7 of the cover allows the extensible sliding action of the saw mount 3 (in the plane of the blade 6) to be fully utilised without snagging of the cover 12 on any part of the machine tool 10, particularly the extensible part 24.

The wet weather cover 12 can be made available in two universal sizes to cover standard saw sizes (with blade 6 having a diameter) from 210mm-255mm and 305mm respectively.

35 There is thus provided:

• A one-piece universal (i.e. to fit different sizes of saws) wet weather cover for electric compound mitre saws.

- A one-piece universal wet weather cover for electric compound mitre saws of 210mm-250mm.
- A one-piece universal wet weather cover for electric compound mitre saws of 305mm.
- A one-piece universal wet weather cover for electric compound mitre saws that is secured to the machine by way of micro-hook and loop means, e.g. Velcro.
- A one-piece universal wet weather cover for electric compound mitre saws that incorporates a long tail cover that allows for the full use of the sliding telescopic action of said tool.
 - A one-piece universal wet weather cover for sliding compound mitre saws.
 - A one-piece universal wet weather cover manufactured from durable breathable brightly coloured nylon or acrylic and secured to the machine by way of Velcro means (straps or otherwise). The design allows full use of the horizontal and vertical motions of the machine and allows for accurate cutting in wet weather.

The cover is preferably made a loose fit so as not to impede airflow through the motor; said material is breathable in order to avoid condensation and/or to allow moisture under said cover to disperse readily; said material is wear-resistant (hard-wearing, tough), flexible and/or woven, preferably a canvas.

It will be apparent to one skilled in the art that features of the different embodiments disclosed herein may be omitted, selected, combined or exchanged and the invention is considered to extend to any new and inventive combination thus formed. Where a preference or particularisation is stated, there is implied the possibility of its negative, i.e. a case in which that preference or particularisation is absent.

Many variations of the invention and embodiments hereinbefore described will be apparent to people skilled in the art and all such variations are to be considered as falling within the scope of the invention.

CLAIMS

- 1. An accessory for a machine tool comprising a mount for a rotary machining member and a motor in a housing carried by and extending from the mount, the motor being connected for rotating the member and the mount having handle means to move the mount, the accessory comprising a cover having a main wet weather-protective part of waterproof material adapted to fit over the motor housing and anchor means to anchor the cover to the mount or housing.
 - 2. An accessory as claimed in claim 1, in which said main part has sheet-like form.
- 3. An accessory as claimed in claim 1 or 2, in which said main part has fastening means to fasten it around the housing.
- 4. An accessory as claimed in claim 1 or 2, in which said main part has fastening means to fasten it together around the housing.
 - An accessory as claimed in claim 3 or 4, in which said fastening means is adjustable.
 - 6. An accessory as claimed in any one of claims 3 to 5, in which said fastening means comprises micro-hook and loop material.
- 7. An accessory as claimed in any one of claims 1 to 6, in which said anchor means is adjustable.
 - 8. An accessory as claimed in any one of claims 1 to 7, which comprises a fastening to fasten at least part of the anchor means to the rest of the cover.
 - 9. An accessory as claimed in claim 8, in which said fastening is adjustable.
 - 10. An accessory as claimed in claim 8 or 9, in which said fastening comprises micro-hook and loop material.
- 20 11. A combination as claimed in any one of claims 8 to 10, in which said anchor means comprises an elongate part connected and/or connectable to the rest of the cover to provide a loop to loop around said mount and thereby anchor said cover to said mount.
- 12. An accessory as claimed in any one of claims 8 to 11, in which said anchor means comprises an elongate part fastenable by means of said fastening to the rest of the cover to provide a loop to loop around said mount and thereby anchor said cover to said mount.
 - 13. An accessory as claimed in claim 12, in which said anchor means comprises an elongate part fastenable by means of said fastening to the rest of the cover to provide a loop to loop around said handle means of said mount and thereby anchor said cover to said mount.
- 14. An accessory as claimed in any one of claims 8 to 13, in which said elongate part is connected at one end to30 the rest of the cover and at the other end is provided with part of said fastening.
 - 15. An accessory as claimed in any one of claims 1 to 14, in which said waterproof material is of a kind that is able to breathe.
 - 16. An accessory as claimed in any one of claims 1 to 15, in which said waterproof material comprises nylon.

- 17. An accessory as claimed in any one of claims 1 to 16, which is brightly coloured.
- 18. An accessory as claimed in any one of claims 1 to 17, which comprises a second wet weather-protective part to fit over said mount.
 - 19. An accessory as claimed in claim 18, in which said second part is cupped to help it fit over said mount.
- 5 20. An accessory as claimed in claim 18 or 19, in which said second part has an edge, remote from said main part, that is recessed to allow better visibility of said rotary machining member.
 - 21. An accessory as claimed in any one of claims 1 to 20, in which said main part is cupped to help it fit around said housing.
- 22. An accessory as claimed in any one of claims 1 to 21, which comprises a trailing wet weather-protective apron10 to cover an extensible part of the mount.
 - 23. An accessory as claimed in any one of claims 1 to 22, in which said cover is shaped and adapted for said motor housing to extend laterally from said mount in a direction parallel to the axis of rotation of said rotary machining member.
- 24. An accessory as claimed in any one of claims 1 to 23, in which said cover is shaped and adapted for said mount to be movable angularly by said handle means in a direction in the plane of rotation of said rotary machining member.
 - 25. An accessory as claimed in any one of claims 1 to 24, in which said cover is shaped and adapted for said mount to be movable linearly and/or extensibly by said handle means in a direction in the plane of rotation of said rotary machining member.
- 26. An accessory as claimed in any one of claims 1 to 25, in which said cover is shaped and adapted for said mount to be rotatable by said handle means to change the direction of the plane of rotation of said rotary machining member.
 - 27. An accessory as claimed in any one of claims 1 to 26, in which said cover is shaped and adapted for said machine tool to be a rotary saw.
- 28. An accessory as claimed in any one of claims 1 to 27, in which said cover is shaped and adapted for said machine tool to be a mitre saw.
 - 29. An accessory as claimed in claim 28, in which said cover is shaped and adapted for said machine tool to be a sliding compound mitre saw.
- 30. An accessory as claimed in claim 29, in which said cover is shaped and adapted said machine tool to be a sliding compound mitre saw of saw diameter 210mm to 250mm.
 - 31. An accessory as claimed in claim 29, in which said cover is shaped and adapted for said machine tool to be a sliding compound mitre saw of saw diameter 305mm.
 - 32. An accessory as claimed in any one of claims 1 to 31, which is a one-piece cover.
 - 33. An accessory comprising a cover, substantially according to any example hereinbefore described.

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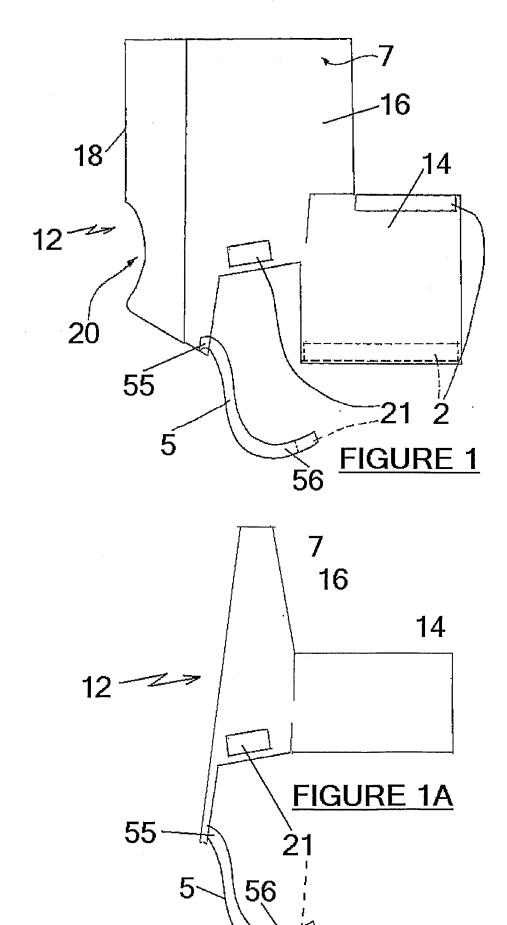
- 34. An accessory comprising a cover, substantially according to any example hereinbefore described with reference to the accompanying drawings.
- 35. A combination of a machine tool and an accessory therefor, the machine tool comprising a mount for a rotary machining member and a motor in a housing carried by and extending from the mount, the motor being connected for rotating the member and the mount having handle means to move the mount, the accessory comprising a cover having a main wet weather-protective part of waterproof material adapted to fit over the motor housing and anchor means to anchor the cover to the mount or housing.
 - 36. A combination as claimed in claim 35, in which said main part has sheet-like form.
- 37. A combination as claimed in claim 35 or 36, in which said main part has fastening means to fasten it around the housing.
 - 38. A combination as claimed in claim 35 or 36, in which said main part has fastening means to fasten it together around the housing.
 - 39. A combination as claimed in any one of claim 37 or 38, in which said fastening means is adjustable.
- 40. A combination as claimed in any one of claims 37 to 39, in which said fastening means comprises micro-hook and loop material.
 - 41. A combination as claimed in any one of claims 35 to 40, in which said anchor means is adjustable.
 - 42. A combination as claimed in any one of claims 35 to 41, in which said anchor means comprises a fastening to fasten it to the rest of the cover.
 - 43. A combination as claimed in claim 42, in which said fastening is adjustable.
- 20 44. A combination as claimed in claim 42 or 43, in which said fastening comprises micro-hook and loop material.
 - 45. A combination as claimed in any one of claims 42 to 44, in which said anchor means comprises an elongate part connected and/or connectable to the rest of the cover to provide a loop to loop around said mount and thereby anchor said cover to said mount.
- 46. An accessory as claimed in any one of claims 42 to 45, in which said anchor means comprises an elongate part fastenable by means of said fastening to the rest of the cover to provide a loop to loop around said mount and thereby anchor said cover to said mount.
 - 47. A combination as claimed in claim 46, in which said anchor means comprises an elongate part fastenable by means of said fastening to the rest of the cover to provide a loop to loop around said handle means of said mount and thereby anchor said cover to said mount.
- 48. A combination as claimed in any one of claims 42 to 47, in which said elongate part is connected at one end to the rest of the cover and at the other end is provided with part of said fastening.
 - 49. A combination as claimed in any one of claims 35 to 48, in which said waterproof material is of a kind that is able to breathe.
 - 50. A combination as claimed in any one of claims 35 to 49, in which said waterproof material comprises nylon.

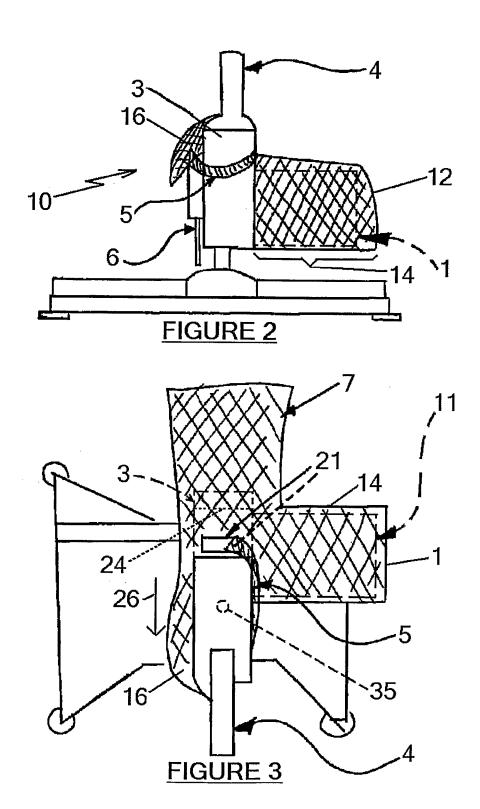
- 51. A combination as claimed in any one of claims 35 to 50, in which said cover is brightly coloured.
- 52. A combination as claimed in any one of claims 35 to 51, in which said cover comprises a second wet weather-protective part to fit over said mount.
 - 53. A combination as claimed in claim 52, in which said second part is cupped to help it fit over said mount.
- 54. A combination as claimed in claim 52 or 53, in which said second part has an edge, remote from said main part, that is recessed to allow better visibility of said rotary member.
 - 55. A combination as claimed in any one of claims 35 to 54, in which said main part is cupped to help it fit around said housing.
- 56. A combination as claimed in any one of claims 35 to 55, which comprises a trailing wet weather-protective apron to cover an extensible part of the mount.
 - 57. A combination as claimed in any one of claims 35 to 56, in which said cover is shaped and adapted for said housing to extend laterally from said mount in a direction parallel to the axis of rotation of said member.
 - 58. A combination as claimed in any one of claims 35 to 57, in which said cover is shaped and adapted for said mount to be movable angularly by said handle means in a direction in the plane of rotation of said member.
- 59. A combination as claimed in any one of claims 35 to 58, in which said cover is shaped and adapted for said mount to be movable linearly and/or extensibly by said handle means in a direction in the plane of rotation of said member.
- 60. A combination as claimed in any one of claims 35 to 59, in which said cover is shaped and adapted for said mount to be rotatable by said handle means to change the direction of the plane of rotation of said rotary machining member.
 - 61. A combination as claimed in any one of claims 35 to 60, in which said cover is shaped and adapted for said machine tool to be a rotary saw.
 - 62. A combination as claimed in any one of claims 35 to 61, in which said cover is shaped and adapted for said machine tool to be a mitre saw.
- 25 63. A combination as claimed in any one of claims 35 to62, in which said cover is shaped and adapted for said machine tool to be a sliding compound mitre saw.
 - 64. A combination as claimed in any one of claims 35 to 63, in which said cover is shaped and adapted for said machine tool to be a sliding compound mitre saw of saw diameter 210mm to 250mm.
- 65. A combination as claimed in any one of claims 35 to 64, in which said cover is shaped and adapted for said 30 machine tool to be a sliding compound mitre saw of saw diameter 305mm.
 - 66. A combination as claimed in any one of claims 35 to 65, in which said accessory is a one-piece cover.
 - 67. A combination machine tool and cover therefor, substantially according to any example hereinbefore described.

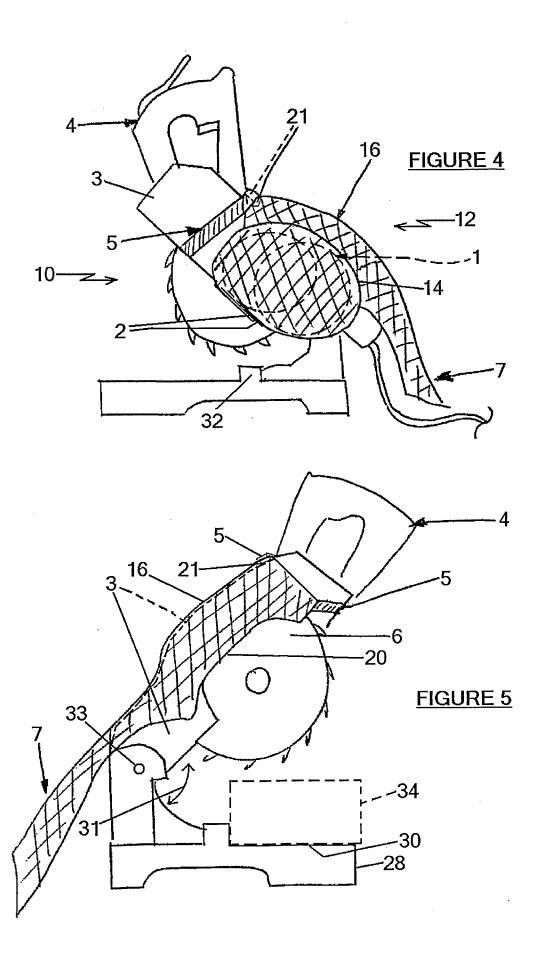
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- 68. A combination machine tool and cover therefor, substantially according to any example hereinbefore described with reference to the accompanying drawings.
- 69. A method of covering or using a machine tool, in which there is used a combination as claimed in any one of claims 35 to 68 and the cover is placed on the tool to protect it.
- 5 70. A method as claimed in claim 69, in which the cover is at least partly secured to the tool by fastening at least one part of the cover around at least one part of the tool.
 - 71. A method as claimed in claim 69, in which the cover is at least partly secured to the tool by fastening at least one part of the cover together around at least one part of the tool.
- 72. A method as claimed in any one of claims 69 to 71, in which the cover is at least partly secured to the tool by fastening an elongate part of the cover around a mount of the tool.
 - 73. A method as claimed in claim 72, in which the cover is at least partly secured to the tool by fastening an elongate part of the cover around handle means of said mount of the tool.
 - 74. A method of covering or using a machine tool, substantially according to any example hereinbefore described.
- 75. A method of covering or using a machine tool, substantially according to any example hereinbefore described with reference to the accompanying drawings.







INTERNATIONAL SEARCH REPORT

International application No
PCT/GB2007/003523

A. CLASSI INV.	FICATION OF SUBJECT MATTER B23D59/00 B25F5/00				
According to	o International Patent Classification (IPC) or to both national class	sification and IPC			
	SEARCHED				
	ocumentation searched (classification system followed by classifi B25F	cation symbols)			
Documenta	tion searched other than minimum documentation to the extent th	at such documents are included	in the fields searched .		
EPO-In	iata base consulted during the international search (name of data	a base and, where practical, sea	rch terms used)		
C. DOCUM	ENTS CONSIDERED TO BE RELEVANT				
Category*	Citation of document, with indication, where appropriate, of the	e relevant passages	Relevant to claim No.		
Х	US 2006/021686 A1 (CARROLL JOSE 2 February 2006 (2006-02-02) paragraph [0004] - paragraph [0	1-32, 35-66, 69-73			
Х	DE 94 20 563 U1 (EWA MARINE KUNSTSTOFFTECHNIK G [DE]) 16 February 1995 (1995-02-16) the whole document	1			
A	GB 2 410 486 A (MCKENDRY JAMES [GB]) 3 August 2005 (2005-08-03 page 3, line 17 - page 4, line 1,2	1,35			
Furt	ther documents are listed in the continuation of Box C.	X See patent family	annex.		
	ther documents are listed in the continuation of Box C. categories of cited documents:	<u></u>	annex. ad after the international filing date		
consid	ent defining the general state of the art which is not dered to be of particular relevance document but published on or after the international	or priority date and no cited to understand th invention	or priority date and not in conflict with the application but cited to understand the principle or theory underlying the		
Thing date "L" document which may throw doubts on priority, claim(s) or		cannot be considered involve an inventive st "Y" document of particular cannot be considered	cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such docu-		
other	means ent published prior to the international filling date but han the priority date claimed	ments, such combinat in the art.	ments, such combination being obvious to a person skilled		
Date of the	actual completion of the international search	Date of mailing of the I	Date of mailing of the international search report		
9	January 2008	18/01/200	18/01/2008		
Name and	mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL ~ 2280 HV Rijswijk	Authorized officer	Authorized officer		
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FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box II.2

Claims Nos.: 33,34,67,68,74,75

The above mentioned claims only refer to the examples of the description and the drawings. No clear technical features can be identified in these claims. Hence no meaningfull search could be carried out.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.2), should the problems which led to the Article 17(2)PCT declaration be overcome.

International application No. PCT/GB2007/003523

INTERNATIONAL SEARCH REPORT

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)
This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
1. Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
2. X Claims Nos.: 33,34,67,68,74,75 because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically: see FURTHER INFORMATION sheet PCT/ISA/210
3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)
This International Searching Authority found multiple inventions in this International application, as follows:
1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.
As only some of the required additional search fees were timely paid by the applicant, this international search reportcovers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee. The additional search fees were accompanied by the applicant's protest but the applicable protest fee were accompanied by the applicant's protest but the applicable protest fee were accompanied by the applicant's protest but the applicable protest fee were accompanied by the applicant's protest but the applicable protest fee were accompanied by the applicant's protest but the applicable protest fee were accompanied by the applicant's protest and, where applicable, the
fee was not paid within the time limit specified in the invitation. No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/GB2007/003523

Patent document cited in search report	Patent document cited in search report			Patent family member(s)	Publication date
US 2006021686	5 A1	02-02-2006	NONE		····
DE 9420563	U1	16-02-1995	NONE		
GB 2410486	A	03-08-2005	NONE	ے ہوں جب سے بہت نظا فات کے دی وہ بہت انت ا انتا ا	