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(54) **Cutting edge for a foldable blade of a work machine**

(57) A cutting edge for a foldable blade of a work machine is disclosed. The cutting edge may comprise of three member components that may be rectilinearly aligned to form a continuous cutting side for contacting work material. The cutting edge may comprise a central member having at least one central cutting side; a first

flanking member having a first cutting side and a second flanking member having a second cutting side. The first and second flanking members and the central member are rectilinearly alignable such that the first and second cutting sides and the central cutting side form a continuous cutting verge.

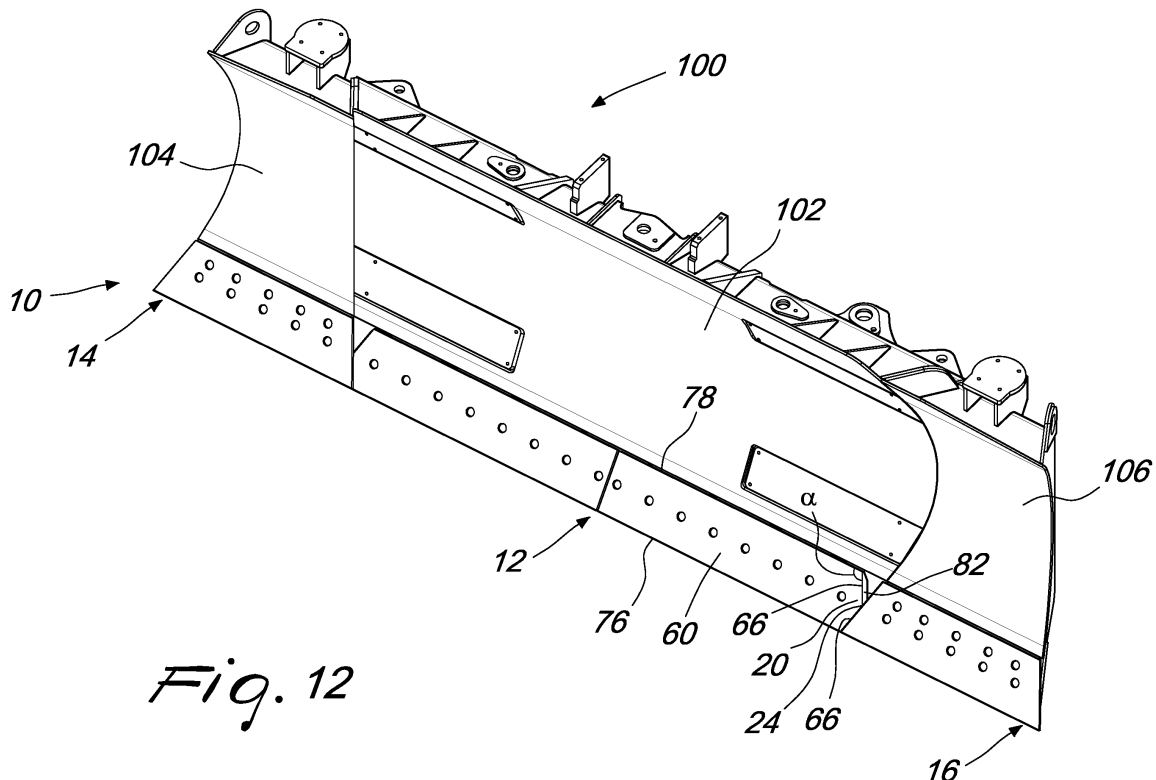


Fig. 12

DescriptionTechnical Field

[0001] This disclosure relates to blades attached to a work machine, in particular to foldable blades that are suitable for work such as digging, soil carrying, and leveling. More particularly, this disclosure relates to the operative cutting edge of foldable blades.

Background

[0002] Work machines such as tractors and bulldozers are generally known. These work machines may have a wide variety of applications in construction and agricultural industries. These machines generally may have ground engaging tracks or wheels which support a chassis and an operator's cab, an engine and a blade for handling of materials. The blade may be wider than the work machine which allows the machine to handle more material thereby decreasing operating costs.

[0003] Transportation restrictions may require that the blade does not extend beyond the width of the work machine. However, in order to comply with transportation restrictions the overall length of the blades may have to be reduced during transportation. Work machines may be equipped with modifiable blades that may be adapted prior to transportation to reduce their effective width. Some modifiable blades may be able to fold and/or to pivot so as to avoid extending beyond the width of the work machine.

[0004] The operating capacity and efficiency of the work machine may be linked to the blade. The ability of the blade to dig into the ground may depend on the edge section (cutting edge), in particular the shape of the cutting edge, the force for pressing the cutting edge into the ground and the angle of the cutting edge when it contacts the earth. Accordingly, the operating efficiency of the blade may be determined by the structure, shape, width, height, position and digging angle of the cutting edge.

[0005] The cutting edge of modifiable blades may need to be suitably adapted to be mounted on such blades while providing the required level of operating efficiency.

[0006] WO1993007344 discloses a cutting edge member for blades of earth moving machines. The cutting edge member has interlocking engagement means with adjacent cutting edge members that have same structure. Each cutting edge member is adjustable and reversible in position relative to said adjacent like cutting-edge members. The interlocking means comprise non-tapered angled dovetailed members spaced along each side of each cutting edge member and being separated by recesses.

[0007] The present disclosure is directed, at least in part, to improving or overcoming one or more aspects of the prior art system.

Brief Summary of the Invention

[0008] In a first aspect, the present disclosure describes a cutting edge for a foldable blade of a work machine, the cutting edge comprising: a central member having opposed first and second apexed terminals and at least one central cutting side disposed between the first and second apexed terminals; a first flanking member having a first cutting side and a first inner inclined end, the first inner inclined end being contiguously positionable to the first apexed terminal; and a second flanking member having a second cutting side and a second inner inclined end, the second inner inclined end being contiguously positionable to the second apexed terminal, wherein the first and second flanking members and the central member are rectilinearly alignable such that the first and second cutting sides and the central cutting side form a continuous cutting verge.

Brief Description of the Drawings

[0009] The foregoing and other features and advantages of the present disclosure will be more fully understood from the following description of various embodiments, when read together with the accompanying drawings, in which:

Fig. 1 is a front view of a cutting edge for a foldable blade according to the present disclosure;

Fig. 2 is a front view of a portion of a central member of the cutting edge of Fig. 1;

Fig. 3 is an end view of the portion of the central member of Fig. 2 from the direction A;

Fig. 4 is a side view of the portion of the central member of Fig. 2;

Fig. 5 is a view of the portion of the central member of Fig. 2 across B-B';

Fig. 6 is a front view of a flanking member of the cutting edge of Fig. 1;

Fig. 7 is an end view of the flanking member of Fig. 6 from the direction C;

Fig. 8 is a side view of the flanking member of Fig. 6; Fig. 9 is a view of the flanking member of Fig. 6 across D-D';

Fig. 10 is a front view of a second flanking member of the cutting edge of Fig. 1;

Fig. 11 is a side view of a second flanking member of Fig. 10;

Fig. 12 is an isometric view of the cutting edge mounted on a foldable blade in an unfolded configuration according to the present invention; and

Fig. 13 is an isometric view of the cutting edge mounted on a foldable blade in a folded configuration according to the present invention.

Detailed Description

[0010] This disclosure generally relates to a cutting

edge **10** for a foldable blade **100** of a work machine. The cutting edge **10** may be mounted onto the foldable blade **100**.

[0011] Fig. 1 illustrates the cutting edge **10**. The cutting edge **10** may comprise a central member **12**, a first flanking member **14** and a second flanking member **16**.

[0012] The central member **12** may have a first apexed terminal **18** and a second apexed terminal **20**. The first and second apexed terminals **18**, **20** are on opposed ends of the central member **12**. Central member **12** may have a longitudinal axis **21**. First and second apexed terminals **18**, **20** may be aligned on the longitudinal axis **21**. First apex **22** of the first apexed terminal **18** and second apex **24** of the second apexed terminal **20** may be positioned on the longitudinal axis **21**.

[0013] Central member **12** may have at least one central cutting side **26**. Central cutting side **26** may be disposed between the first and second apexed terminals **18**, **20**. Central cutting side **26** may be connected to the first and second apexed terminals **18**, **20**. Central cutting side **26** may extend along the entire length of the central member **12**. Central cutting side **26** may be parallel with the longitudinal axis **21**.

[0014] The first flanking member **14** may have a first cutting side **28**. First cutting side **28** may extend along the entire side of the first flanking member **14**. First cutting side **28** may be parallel with a longitudinal axis **30** of the first flanking member **14**.

[0015] First flanking member **14** may have a first inner inclined end **32**. First inner inclined end **32** may be connected to the first cutting side **28**. First inner inclined end **32** may be angled relative to the first cutting side **28**. First inner inclined end **32** may be angled relative to the longitudinal axis **30**.

[0016] First flanking member **14** may be positionable so as to be in abutting contact with central member **12**. The first inner inclined end **32** may be contiguously positionable to the first apexed terminal **18**. First inner inclined end **32** may be configured to match the configuration of the first apexed terminal **18**.

[0017] The second flanking member **16** may have a second cutting side **34**. Second cutting side **34** may extend along the entire side of the second flanking member **16**. Second cutting side **34** may be parallel with a longitudinal axis **36** of the second flanking member **16**.

[0018] Second flanking member **16** may have a second inner inclined end **38**. Second inner inclined end **38** may be connected to the second cutting side **34**. Second inner inclined end **38** may be angled relative to the second cutting side **34**. Second inner inclined end **38** may be angled relative to the longitudinal axis **36**.

[0019] Second flanking member **16** may be positionable so as to be in abutting contact with central member **12**. The second inner inclined end **38** may be contiguously positionable to the second apexed terminal **20**. Second inner inclined end **38** may be configured to match the configuration of the second apexed terminal **20**.

[0020] The first and second flanking members **14**, **16**

may be moved relative to the central member **12**. First and second flanking members **14**, **16** and the central member **12** may be positioned such that the longitudinal axes **21**, **30**, **36** may be mutually aligned. First and second flanking members **14**, **16** and the central member **12** may be rectilinearly alignable such that the first and second cutting sides **28**, **34** and the central cutting side **26** form a continuous cutting verge **40**. First and second cutting sides **28**, **34** and the central cutting side **26** may be formed as a continuous edge for contacting work material or for contacting ground to be leveled. First and second flanking members **14**, **16** may be juxtaposed on opposite ends of the central member **12**.

[0021] The central member **12** may further comprise a second central cutting side **42**. Second central cutting side **42** may be parallel to the central cutting side **26**. Second central cutting side **42** may be disposed between the first and second apexed terminals **18**, **20**. Second central cutting side **42** may be connected to the first and second apexed terminals **18**, **20**. Second central cutting side **42** may extend along the entire length of the central member **12**. Second central cutting side **42** may be parallel with the longitudinal axis **21**.

[0022] The central member **12** may be rotated so that the second central cutting side **42** occupies the position of the central cutting side **26** such that the second central cutting side **42** may form a continuous blade verge with first and second cutting sides **28**, **34**.

[0023] In an embodiment, the central member **12** may comprise a first central portion **44** and a second central portion **46**. The first central portion **44** may have the first apexed terminal **18**. The second central portion **46** may have the second apexed terminal **20**.

[0024] The first central portion **44** may have a first inner end **48** and the second central portion **46** may have a second inner end **50**. First inner end **48** may be disposed opposite the first apexed terminal **18**. Second inner end **50** may be disposed opposite the second apexed terminal **20**. The first inner end **48** may be abuttingly positionable to the second inner end **50**. The first inner end **48** may be contiguously positioned to the second inner end **50**.

[0025] The first flanking member **14** may have a first outer inclined end **52** that is opposite to the first inner inclined end **32**. The second flanking member **16** may have a second outer inclined end **54** that is opposite to the second inner inclined end **38**.

[0026] With reference to Fig. 2, a first central portion **44** of the central member **12** is illustrated. The following description duly applies to corresponding features on the second central portion **46** that have not been herein described.

[0027] First central portion **44** may have parallel cutting sides that are portions of the central cutting side **26** and the second central cutting side **42**. The first and second cutting side portions **56**, **58** may be formed between the first apexed terminal **18** and the first inner end **48**. First and second cutting side portions **56**, **58** may each have

a length of 1107.7mm. First inner end **48** may have a height of 126.2mm. First inner end **48** may be perpendicular to the first and second cutting side portions **56, 58**.

[0028] First central portion **44** may have a front central face **60**. Front central face **60** may be bound by first and second cutting side portions **56, 58**, first apexed terminal **18** and the first inner end **48**.

[0029] First central portion **44** may be provided with holes **62** for receiving bolts or rivets to mount the first central portion **44** on the foldable blade **100**. Holes **62** may extend through the first central portion **44**. The holes **62** may be aligned along the longitudinal axis **21**. The holes **62** may be aligned on the longitudinal axis **21** so as to allow the central member **12** to be rotated such that second central cutting side **42** replaces the central cutting side **26** at the continuous cutting verge (40). The holes **62** may be mutually spaced by a distance of 152.4mm. In an embodiment, the holes **62** are square shaped.

[0030] With reference to Figs. 1 and 2, the first apexed terminal **18** may have sloped sides **64**. Each sloped side **64** may extend between respective first and second cutting side portions **56, 58** and first apex **22**. At least one sloped side **64** may have an angle α of 69° from the at least one central cutting side **26**. Sloped sides **64** may each have an angle α of 69° from the respective first and second cutting side portions **56, 58**. Each sloped side **64** may have a length of 127.8mm.

[0031] The second apexed terminal **20** may have sloped sides **66**. With respect to Fig. 12, each sloped side **66** may extend between respective first and second cutting side portions **76, 78** and second apex **24**. At least one sloped side **66** may have an angle α of 69° from the at least one central cutting side **26**. With reference to Fig. 12, sloped sides **66** may each have an angle α of 69° from the respective first and second cutting side portions **76, 78**. Each sloped side **66** may have a length of 127.8mm.

[0032] With reference to Fig. 2, the first apex **22** of the first apexed terminal **18** may extend beyond the end of the first and second cutting side portions **56, 58**. The distance from apex **22** to the first inner end **48** may be 1217.3mm. The longitudinal length of the apex **22** extending from a point on the longitudinal axis **21** corresponding to the end of the first and second cutting side portions **56, 58** may be 109.6mm. With reference to Fig. 12, the longitudinal length of the apex **24** extending from a point on the longitudinal axis **21** corresponding to the end of the respective first and second cutting side portions **76, 78** may be 109.6mm.

[0033] The apexes **22, 24** of the first and second apexed terminals **18, 20** extend beyond the respective opposite ends of the at least one central cutting side **26** at a longitudinal distance of 109.6mm

[0034] With reference to Fig. 3, the first central portion **44** may have a rear central face **70** opposite the front central face **60**. Holes **62** may extend from the front central face **60** to the rear central face **70**. Front and rear central faces **60, 70** may be mutually parallel. Rear cen-

tral face **70** may have a smaller dimension relative to the front central face **60**. Rear central face **70** may have a smaller surface area relative to the front central face **60**.

[0035] Front central surface **60** may have a transverse width of 254mm. Rear central face **70** may have a transverse width of 198.2mm.

[0036] First and second cutting side portions **56, 58** may each comprise a slanted surface **72** and a flat surface **74**. The slanted surface **72** and the flat surface **74** may be parallel to the longitudinal axis **21**. Slanted surface **72** and the flat surface **74** may extend along the entire length of the first and second cutting side portions **56, 58**.

[0037] The horizontal distance between each junction of the flat surface **74** and the oblique surface **68** from the centre of the adjacent hole **62** may be 52.9mm. The horizontal distance may be parallel to the longitudinal axis **21** of the central member **12**

[0038] First and second cutting side portions **56, 58** may have a width of 19mm that extends between the rear central face **70** and the front central face **60**. Each slanted surface **72** may be inclined relative to the rear central face **70** at an angle of 20° to 30° . Each slanted surface **72** may be inclined relative to the rear central face **70** at an angle of 25° . The vertical distance from the rear central face **70** and the front central face **60** may be 27.9mm, the vertical distance may be transverse to the longitudinal axis **21** of the central member **12**. The vertical distance may be measured from the edge of the rear central face **70** to the adjacent edge of the front central face **60**. The edges of the rear central face **70** and the front central face **60** may be parallel to the longitudinal axis **21**. With reference to Fig. 4, the first central portion **44** may be a substantially flat panel with the apexed terminal **18** extending from the first and second cutting side portions **56, 58**.

[0039] With reference to Figs. 2 and 3, the first apexed terminal **18** may have oblique surfaces **68** that are formed between front central face **60** and rear central face **70**. Oblique surfaces **68** may extend from respective first and second cutting side portions **56, 58** to apex **22**. Oblique surfaces **68** may be inclined from respective sloped sides **64**.

[0040] With reference to Fig. 5 each oblique surface **68** may be inclined relative to front central face **60** at an angle of 55° to 65° . Each oblique surface **68** may be inclined relative to front central face **60** at an angle of 60° .

[0041] With reference to Fig. 12, the second apexed terminal **20** may have oblique surfaces **82** that are formed between front central face **60** and rear central face **70**. Oblique surfaces **82** may extend from respective first and second cutting side portions **76, 78** to apex **24**. Oblique surfaces **82** may be inclined from respective sloped sides **66**.

[0042] Each oblique surface **82** may be inclined relative to front central face **60** at an angle of 59.5° to 60.5° . Each oblique surface **82** may be inclined relative to front central face **60** at an angle of 60° .

[0043] With reference to Fig. 6, a first flanking member **14** is illustrated. The following description duly applies to corresponding features on the second flanking member **16** that have not been herein described.

[0044] First flanking member **14** may have a first limit side **80** opposite to the first cutting side **28**. First limit side **80** may be parallel to the first cutting side **28**. First flanking member **14** may have the first outer inclined end **52** opposite to the first inner inclined end **32**. First outer inclined end **52** and first inner inclined end **32** may diverge from ends of first limit side **80** and connect to ends of first cutting side **28**. First flanking member **14** may have a trapezoidal shape. First limit side **80** may have a length of 748mm. First cutting side **28** may have a length of 943mm. First outer inclined end **52** and first inner inclined end **32** may each have a length of 272.07mm.

[0045] First inner inclined end **32** may have an angle β of 111° from the first limit side **80**. With reference to Fig. 10, second inclined end **38** of second flanking member **16** may have an angle β of 111° from the second limit side **90**. First outer inclined end **52** and second outer inclined end **54** may each have an angle β of 111° from the respective first and second limit sides **80**, **90**. First inclined end **32** and second inclined end **38** may be configured so as to correspond with respective sloped sides **64**, **66** of the central member **12**.

[0046] First flanking member **14** may have a first front flanking face **84**. First front flanking face **84** may be bound by first outer inclined end **52**, first inclined end **32**, first cutting side **28** and first limit side **80**.

[0047] First flanking member **14** may be provided with a set of apertures **86** and a set of openings **88** for receiving bolts or rivets to mount the first flanking member **14** on a foldable blade. Apertures **86** and openings **88** may extend through the first flanking member **14**. The apertures **86** may be aligned along the longitudinal axis **36**. The apertures **86** may be mutually spaced by a distance of 152.4mm. In an embodiment, the apertures **86** are square shaped. The openings **88** may be positioned between the first limit side **80** and the set of apertures **86**. In an embodiment, the openings **88** are square shaped.

[0048] With reference to Fig. 7, the first flanking member **14** may have a first rear flanking face **92** opposite the first front flanking face **84**. Apertures **86** and openings **88** may extend from the first front flanking face **84** to the first rear flanking face **92**. First front flanking face **84** and first rear flanking face **92** may be mutually parallel. First rear flanking face **92** may have a smaller dimension relative to the first front flanking face **84**. First rear flanking face **92** may have a smaller surface area relative to the first front flanking face **84**.

[0049] First front flanking face **84** may have a transverse width of 254mm. First rear flanking face **92** may have a transverse width of 198.2mm.

[0050] First limit side **80** and first cutting side **28** may each comprise a slanted surface **94** and a flat surface **96**. The slanted surface **94** and the flat surface **96** may be parallel to the longitudinal axis **36**. Slanted surface **94**

and the flat surface **96** may extend along the entire length of the first limit side **80** and the first cutting side **28**.

[0051] First limit side **80** and first cutting side **28** may have a width of 25mm that extends between the first front flanking face **84** and the first rear flanking face **92**. Each slanted surface **94** may be inclined relative to the first rear flanking face **92** at an angle of 20° to 30° . Each slanted surface **94** may be inclined relative to the first rear flanking face **92** at an angle of 25° . The vertical distance from the first rear flanking face **92** and the first front flanking face **84** may be 27.9mm. With reference to Fig. 8, the first flanking member **14** may be a substantially flat panel.

[0052] With reference to Fig. 8, the first inclined end **32** may have a first bevel surface **98** that is formed between first front flanking face **84** and the first rear flanking face **92**. First bevel surface **98** may extend between first limit side **80** and the first cutting side **28** (not shown). First bevel surface **98** may be inclined relative to first flanking face **84**.

[0053] In an embodiment, first outer inclined end may be provided with a first outer bevel surface **99**. The first outer bevel surface **99** may be formed between first front flanking face **84** and first rear flanking faces **92**. First outer bevel surface **99** may extend between limit side **80** and cutting side **28**.

[0054] With reference to Fig. 9, first bevel surface **98** may be inclined relative to first rear flanking face **92** at an angle of 59.5° to 60.5° . First bevel surface **98** may be inclined relative to first rear flanking face **92** at an angle of 60° .

[0055] With reference to Fig. 11 the second inclined end **38** may have a second bevel surface **108** that is formed between second front flanking face **110** and the second rear flanking face **112**. Second bevel surface **108** may extend between second limit side **114** and the second cutting side **34** (not shown). Second bevel surface **108** may be inclined relative to second front flanking face **110**.

[0056] In an embodiment, second outer inclined end **54** may have a second outer bevel surface **109**. The second outer bevel surface **109** may be formed between second front flanking face **110** and second rear flanking face **112**. Second outer bevel surface **109** may extend between limit side **114** and cutting side **34**.

[0057] Second bevel surface **108** may be inclined relative to second rear flanking face **112** at an angle of 59.5° to 60.5° . Second bevel surface **108** may be inclined relative to second rear flanking face **112** at an angle of 60° .

[0058] With reference to Fig. 12, the cutting edge **10** may be mounted to a foldable blade **100**. Foldable blade **100** may have a centre element **102**, a first flanking element **104** and a second flanking element **106**. Central member **12** may be mounted to the centre element **102**. First flanking member **14** may be mounted to first flanking element **104**. Second flanking member **106** may be mounted to second flanking element **106**.

[0059] Foldable blade **100** may be in an unfolded con-

figuration with first and second flanking elements **104**, **106** being rectilinearly aligned with the centre element **102**. In the unfolded configuration of the foldable blade **100**, the first and second flanking members **14** may be positioned rectilinearly with the central member **12**.

[0060] With reference to Fig. 13, the foldable blade **100** may be in a folded configuration with first and second flanking elements **104**, **106** being inclined relative to the centre element **102**. In the folded configuration of the foldable blade **100**, the first and second flanking members **14**, **16** may be inclined relative to the central member **12**.

[0061] The skilled person would appreciate that foregoing embodiment may be modified or combined to obtain the cutting edge **10** of the present disclosure.

Industrial Applicability

[0062] This disclosure describes a cutting edge **10** for a foldable blade **100** of a work machine. The foldable blade **100** may be folded so that the overall length thereof may be reduced for transportation of the work machine. The cutting edge **10** may have at least three members **12**, **14**, **16**. In an embodiment, the cutting edge **10** may have four members with first and second central portions **44**, **46**. The cutting edge **10** may be mounted to the foldable blade **100**.

[0063] In the folded configuration of the foldable blade **100**, the flanking members **14**, **16** may be positioned so as to be rectilinearly aligned to the central member **12**. First and second inclined ends **32**, **38** may be suitably configured to correspond with the first and second apexed terminals **18**, **20** so that the flanking members **14**, **16** may be flush with the central member **12**. The central cutting side **26** may be aligned with the first and second cutting sides **28**, **34** so as to form a continuous cutting verge **40**. The cutting verge **40** may contact the work materials during work operations.

[0064] Accordingly, this disclosure includes all modifications and equivalents of the subject matter recited in the claims appended hereto as permitted by applicable law. Moreover, any combination of the above-described elements in all possible variations thereof is encompassed by the disclosure unless otherwise indicated herein.

[0065] Where technical features mentioned in any claim are followed by reference signs, the reference signs have been included for the sole purpose of increasing the intelligibility of the claims and accordingly, neither the reference signs nor their absence have any limiting effect on the technical features as described above or on the scope of any claim elements.

[0066] One skilled in the art will realise the disclosure may be embodied in other specific forms without departing from the disclosure or essential characteristics thereof. The foregoing embodiments are therefore to be considered in all respects illustrative rather than limiting of the disclosure described herein. Scope of the invention

is thus indicated by the appended claims, rather than the foregoing description, and all changes that come within the meaning and range of equivalence of the claims are therefore intended to be embraced therein.

Claims

1. A cutting edge (10) for a foldable blade (100) of a work machine, the cutting edge (10) comprising:

a central member (12) having opposed first and second apexed terminals (18, 20) and at least one central cutting side (26) disposed between the first and second apexed terminals (18, 20); a first flanking member (14) having a first cutting side (28) and a first inner inclined end (32), the first inner inclined end (32) being contiguously positionable to the first apexed terminal (18); and

a second flanking member (16) having a second cutting side (34) and a second inner inclined end (38), the second inner inclined end (38) being contiguously positionable to the second apexed terminal (20),

wherein the first and second flanking members (14, 16) and the central member (12) are rectilinearly alignable such that the first and second cutting sides (28, 34) and the central cutting side (26) form a continuous cutting verge (40).

2. The cutting edge (10) according to claim 1 wherein the central member (12) comprises a second central cutting side (42) parallel to the at least one central cutting side (26).

3. The cutting edge (10) according to claim 1 or claim 2 wherein the first and second apexed terminals (18, 20) have respective sloped sides (64, 66), at least one respective sloped side (64, 66) has an angle (α) of 69° from the at least one cutting side (26).

4. The cutting edge (10) according to any one of preceding claims wherein the apexes (22, 24) of the first and second apexed terminals (18, 20) extend beyond the respective opposite ends of the at least one central cutting side (26) at a longitudinal distance of 109.6mm.

5. The cutting edge (10) according to any one of preceding claims wherein the first and second apexed terminals (18, 20) have oblique surfaces (68, 74) formed between a front central face (60) and a rear central face (70) of the central member (12).

6. The cutting edge (10) according to claim 5 wherein each oblique surface (68, 82) has an angle of 59.5°

to 60.5⁰ from the front central face (60).

7. The cutting edge (10) according to any one of preceding claims wherein the first inner inclined end (32) and the second inner inclined end (38) have angles of 69⁰ respectively from the first and second limit sides (80, 90). 5
8. The cutting edge (10) according to any one of preceding claims wherein the first inner inclined end (32) has a first bevel surface (98) formed between a first front flanking face (84) and a first rear flanking face (92) of the first flanking member (14) and the second inner inclined end (38) has a second bevel surface (108) formed between a second front flanking face (110) and a second rear flanking face (112) of the second flanking member (16). 10
9. The cutting edge (10) according to claim 8 wherein the first bevel surface (98) has an angle of 59.5⁰ to 60.5⁰ from the first rear flanking face (92) and the second bevel surface (108) has an angle of 59.5⁰ to 60.5⁰ from the second rear flanking face (112). 15
10. The cutting edge (10) according to any one of the preceding claims wherein the central member (12) includes a first central portion (44) having the first apexed terminal (18) and a second central portion (46) having the second apexed terminal (20). 20
11. The cutting edge (10) according to claim 10 wherein the first central portion (44) has a first inner end (48) opposite the first apexed terminal (18) and the second central portion (46) has a second inner end (50) opposite the second apexed terminal (20), the first inner end (48) being abuttingly positionable to the second inner end (50). 25
12. The cutting edge (10) according to any one of preceding claims 2 to 11 wherein holes (62) are formed along the longitudinal axis (21) of the central member (12) so as to permit rotation of the central member (12) such that second central cutting side (42) replaces the at least one central cutting side (26) at the continuous cutting verge (40). 30
13. A foldable blade (100) of a work machine, the foldable blade (100) comprising: 35

a cutting edge (10) of any one of preceding claims, wherein the central member (12) is mounted to a central element (102), the first flanking member (14) is mounted to a first flanking element (104) and the second flanking element (16) is mounted to the second flanking element (106) such that the cutting edge (10) is aligned to form a continuous cutting verge (40) when the first and second flanking elements 40

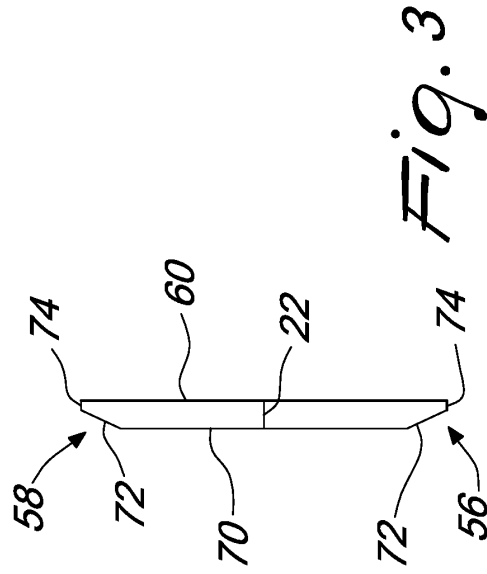
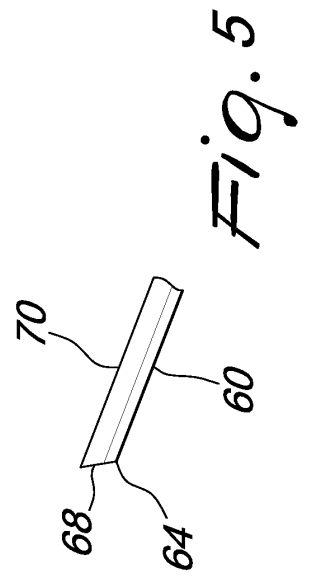
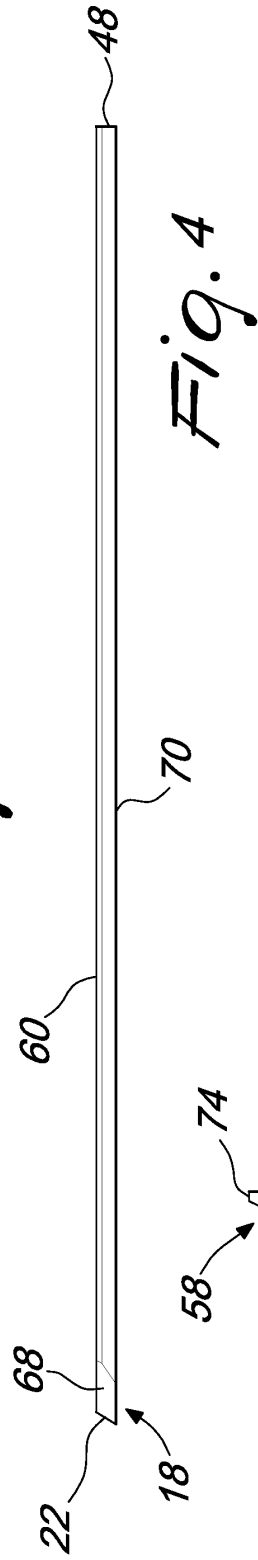
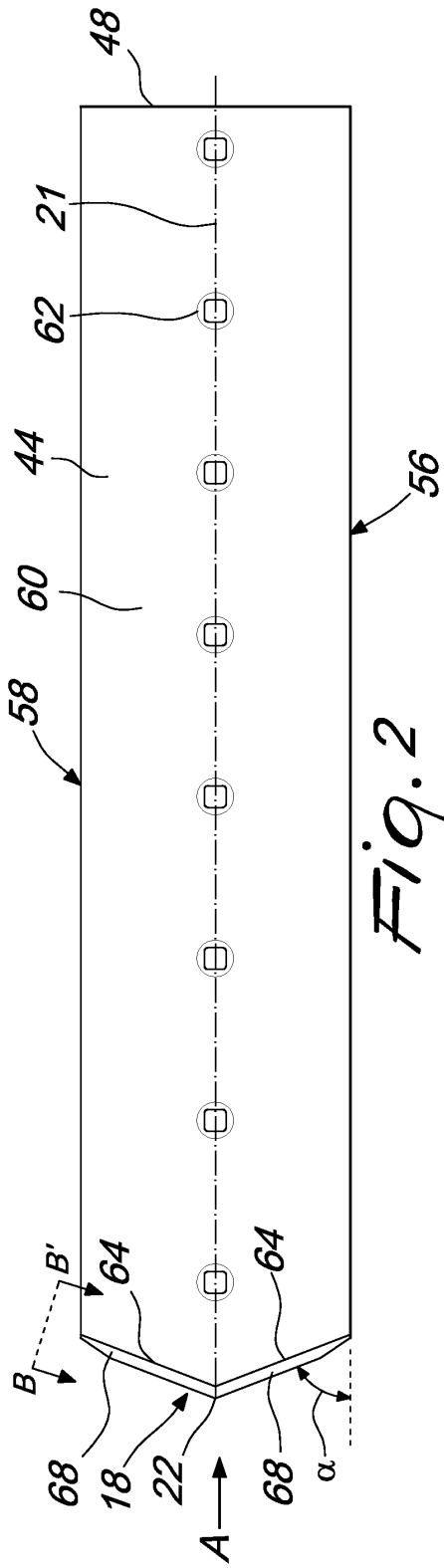
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(104, 106) are rectilinearly aligned to the central element (102).

14. A central member (12) for a cutting edge (10) of a foldable blade (100) of a work machine having opposed first and second apexed terminals (18, 20) and at least one central cutting side (26) disposed between the first and second apexed terminals (18, 20). 5
15. A flanking member (14) for a cutting edge (10) of a foldable blade (100) of a work machine having a first cutting side (28) disposed opposite a first limit side (80), the first cutting side being parallel to the first limit side (80) and a first inner inclined end (32) and a first outer inclined end (52) diverging from the first inner inclined end (32) and the first outer inclined end (52). 10
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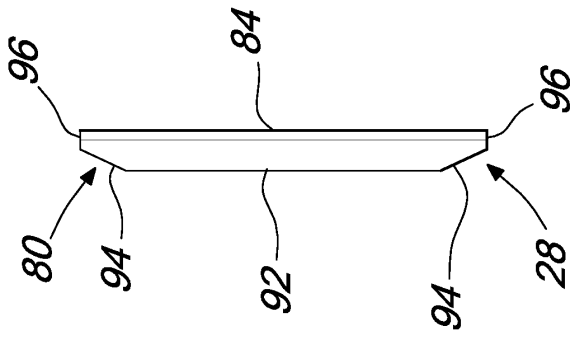


Fig. 7

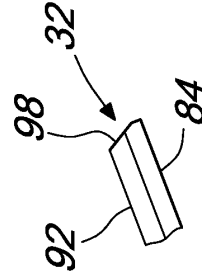


Fig. 9

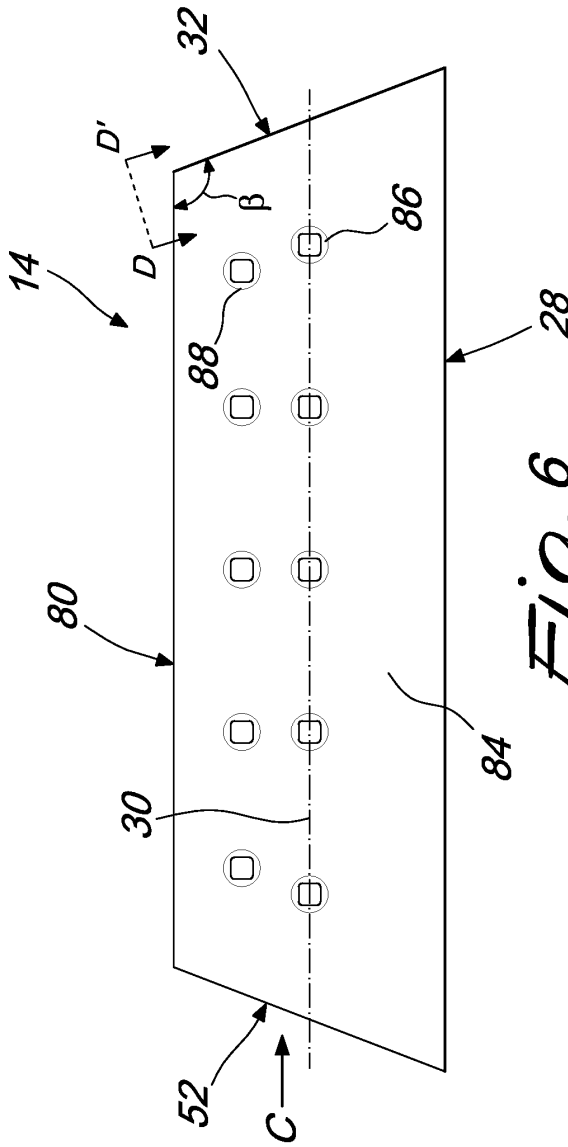


Fig. 6

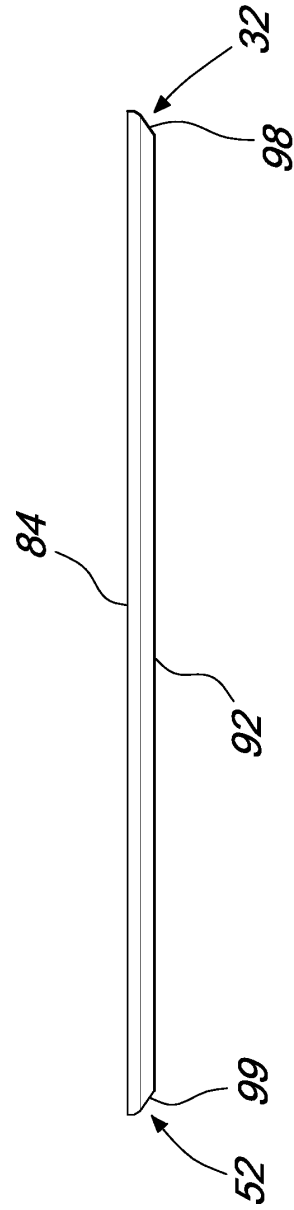
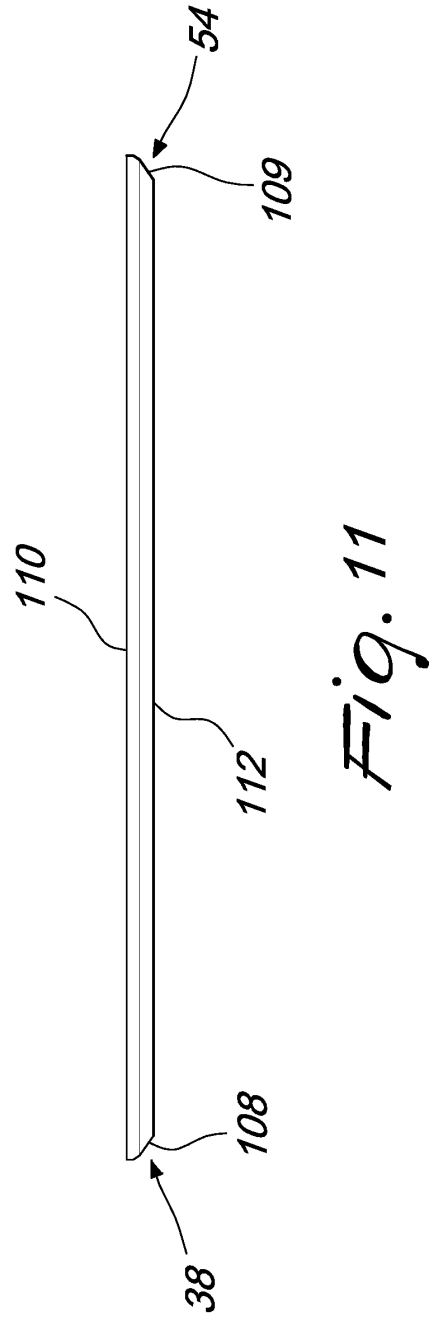
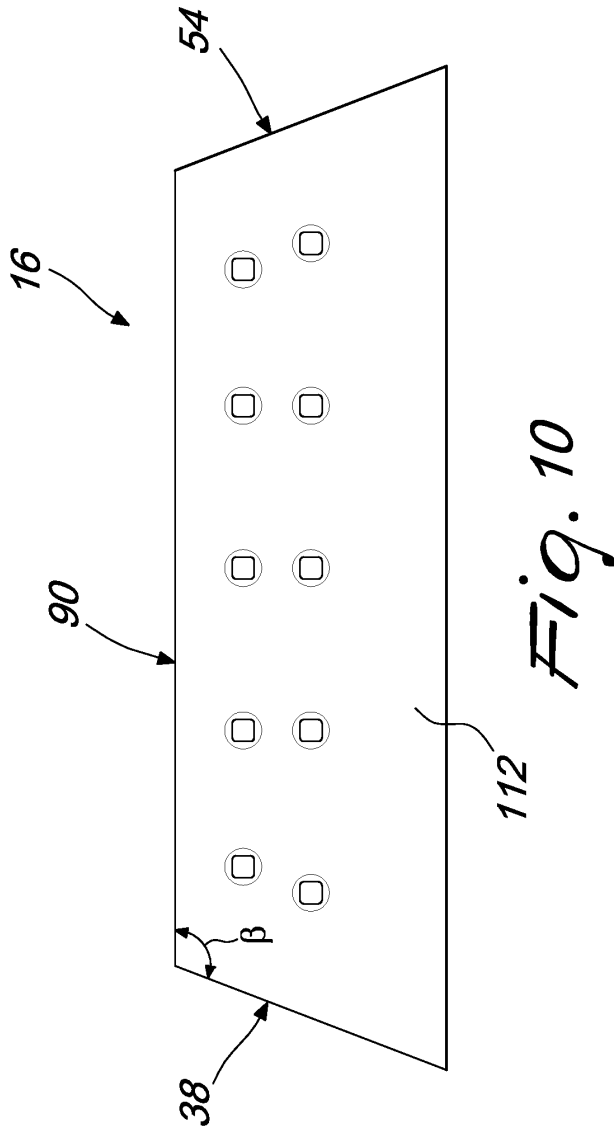


Fig. 8



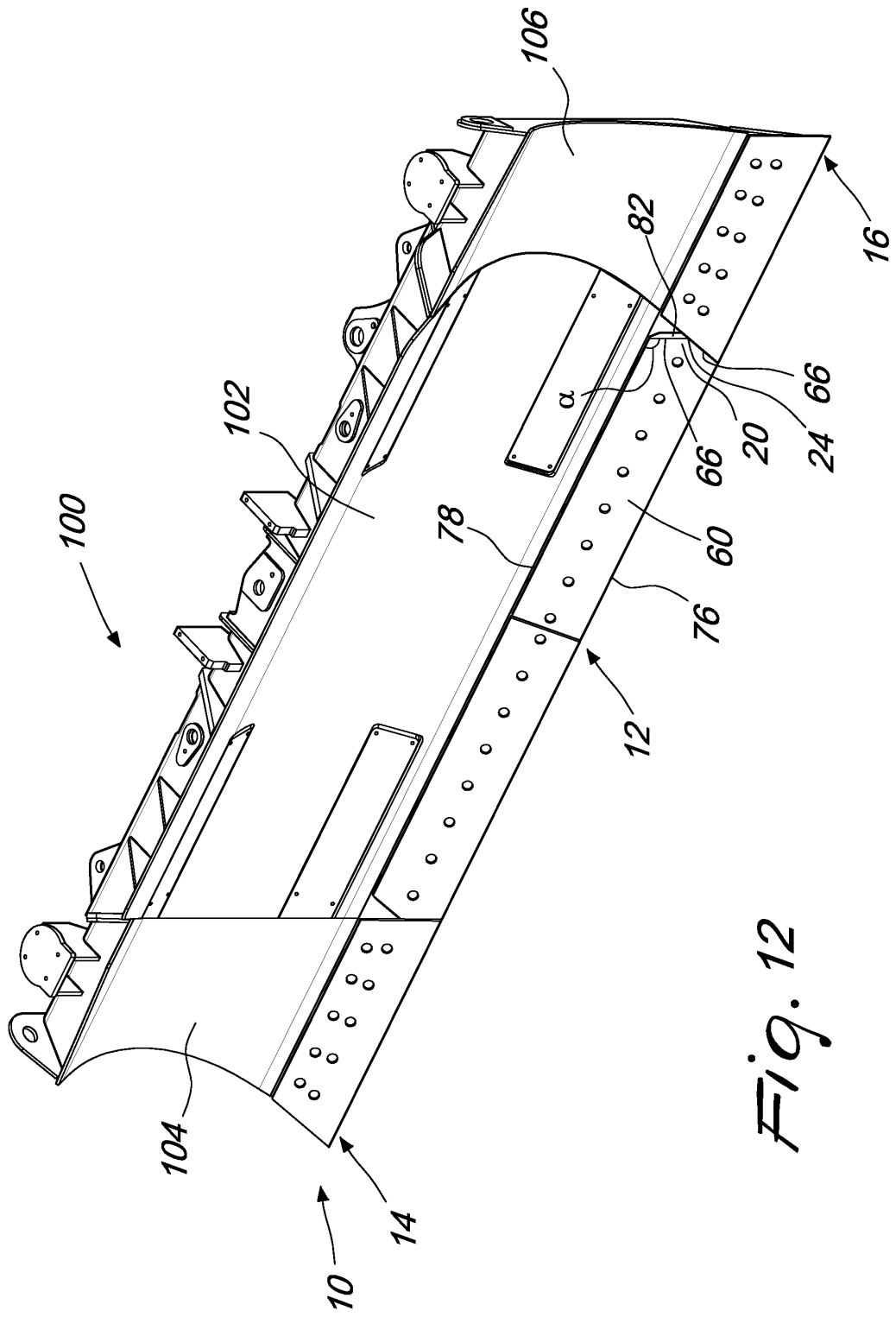


Fig. 12

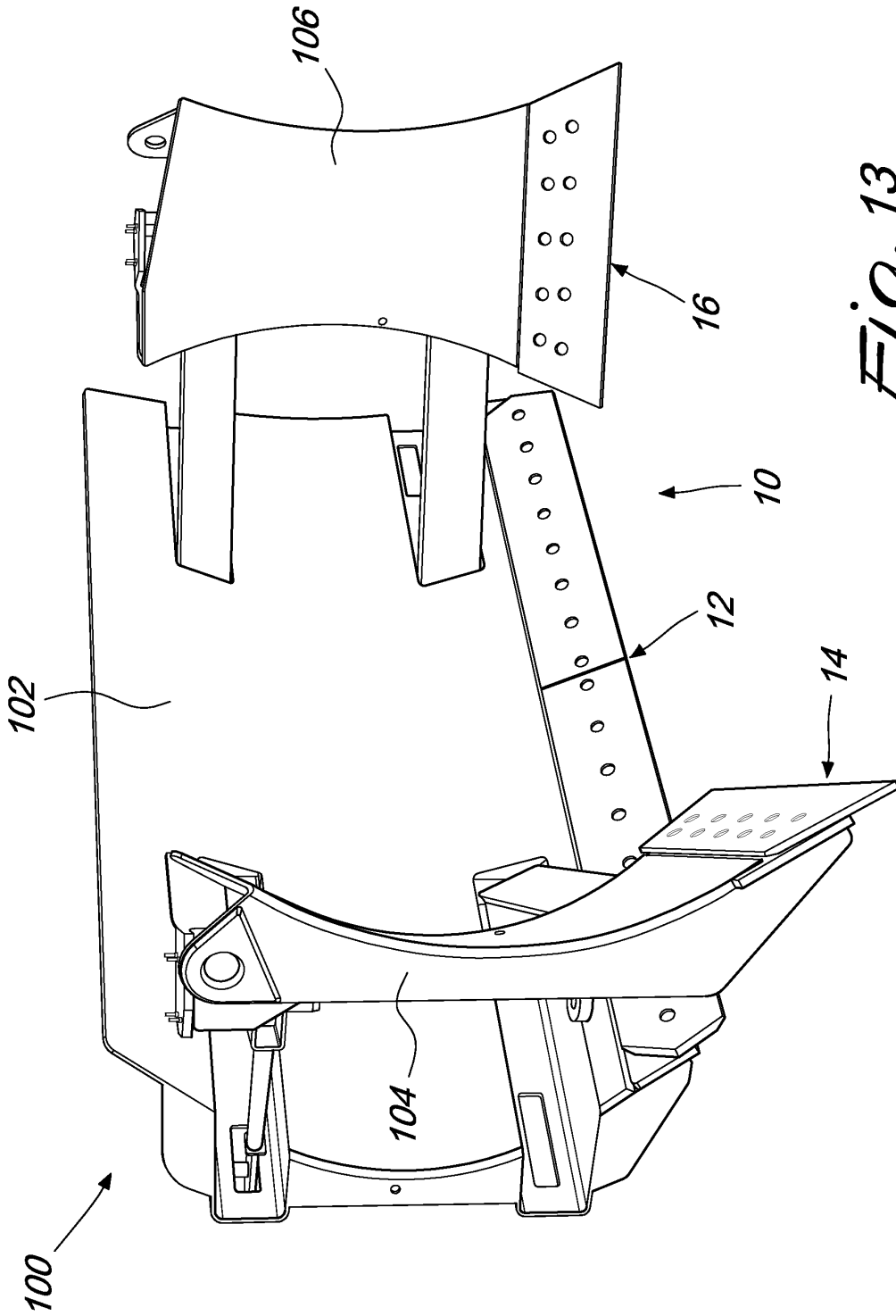


Fig. 13



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Application Number
EP 13 16 2962

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			E02F
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 27 September 2013	Examiner Clarke, Alister
CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	
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