

FORM 2

**THE PATENTS ACT, 1970
(39 of 1970)
&
THE PATENTS RULES, 2003**

**COMPLETE SPECIFICATION
(See section 10 and rule 13)**

1. TITLE OF THE INVENTION

“SHROUD COLLAR FOR EDGE PROTECTION OF A WORK TOOL”

2. APPLICANTS

Name: CATERPILLAR INC.

Nationality: a company organized and existing under the laws of the United States of America

Address: 100 N.E. Adams St. Peoria, IL 61629, United States of America

3. PREAMBLE TO THE DESCRIPTION

COMPLETE

The following specification particularly describes the invention and the manner in which it is to be performed.

WE CLAIM:

1. A shroud collar (30) for protecting an edge (18) of a work tool (10), the shroud collar comprising:
 - 5 a first side plate (32) including a first lower leg (72) and a first upper leg (74) spaced apart from the first lower leg;
 - a second side plate (34) spaced apart from the first side plate, the second side plate including a second lower leg (96) and a second upper leg (98) spaced apart from the second lower leg; and
 - 10 an upper crossbar (36) connected to the first side plate and the second side plate, the upper crossbar configured to be connectable to the work tool.
2. The shroud collar of claim 1, further including a lower
15 crossbar (52) connected to the first side plate and the second side plate.
3. The shroud collar of claim 2, wherein the lower crossbar is connected to the first side plate and the second side plate via fasteners (66).
- 20 4. The shroud collar of claim 3, further including:
 - a first hole (92) disposed in the first lower leg;
 - a second hole (94) disposed in the first upper leg;
 - a third hole (112) disposed in the second lower leg;
 - a fourth hole (114) disposed in the second upper leg; and
 - 25 a plurality of fasteners (46, 66) thread ably engaging with the first hole, the second hole, the third hole, and the fourth hole to attach the upper crossbar and the lower crossbar to the first side plate and the second side plate.
5. The shroud collar of claim 1, wherein the first side plate has
30 a first width and the second side plate has a second width different from the first width.

6. The shroud collar of claim 1, wherein the first upper leg has a first thickness and the second upper leg has a second thickness different from the first thickness.

5

7. The shroud collar of claim 1, wherein the first upper leg has a first length and the second upper leg has a second length different from the first length.

10

8. The shroud collar of claim 1, wherein:

the first side plate has a first inner side (56) and a first outer side (54) disposed opposite the first inner side, the first outer side having a first chamfer (116);

15 the second side plate has a second inner side (60) and a second outer side (58) disposed opposite the second inner side, the second outer side having a second chamfer (118); and

the first side plate and the second side plate are arranged such that the first inner side is disposed generally parallel to and opposite the second inner side.

20

9. The shroud collar of claim 1, wherein

the first side plate extends from a collar front end (68) to a collar rear end (70);

25 the second side plate extends from the collar front end to the collar rear end;

the upper crossbar is disposed adjacent the collar rear end and extends from a first end (62) disposed adjacent the first upper leg to a second end (64) disposed adjacent the second upper leg, and

30 the upper crossbar is attached to the first upper leg at the first end and to the second upper leg at the second end.

10. A work tool (10), comprising:
a first side wall (12);
a second side wall (14) spaced apart from the first side wall;
a primary wall (16) including an edge (18) extending from the first
5 side wall to the second side wall;
a first tooth assembly (20) attached to the edge;
a second tooth assembly (20) attached to the edge, the second tooth
assembly being spaced apart from the first tooth assembly;
a shroud boss (48) disposed between the first tooth assembly and
10 the second tooth assembly;
a shroud (24) attached to the shroud boss, the shroud being
separated from the first tooth assembly by a first gap (42), the shroud being
separated from the second tooth assembly by a second gap (44); and
a shroud collar (30) disposed about the shroud, the shroud collar
15 including:
a first side plate (32) disposed in the first gap;
a second side plate (34) spaced apart from the first side plate, the
second side plate being disposed in the second gap; and
an upper crossbar (36) extending between the first side plate and
20 the second side plate, the upper crossbar being connected to the first side plate, the
second side plate, and the shroud boss.

Dated this 26th day of February, 2018

25

Signature:



Name:

AMIT ASWAL
of anovIP
AGENT FOR THE APPLICANTS