

Claims

1. A fastener, comprising:

a substantially cylindrical fastener having a top, a bottom, and a central longitudinal axis extending from the top to the bottom;

5 a head located at the top being the largest diameter of the fastener;

a shank extending immediately downward from the head, said shank having a plurality of knurls extending radially therefrom;

wherein the knurls are arranged in rows, each row in longitudinal alignment parallel to the longitudinal axis and the rows are equally spaced radially around a circumference of the

10 shank; and

wherein the cross-sectional profile in a longitudinal plane containing the longitudinal axis of the fastener consists of a series of valleys between arcuate peaks.
2. The fastener of claim 1 wherein the at least one of said rows has a wavy cross-sectional profile in a lateral plane of the row perpendicular to said longitudinal plane, said profile
- 15 having arcuate sides.
3. The fastener of claim 1 wherein the fastener has a plurality of identical longitudinal rows.
4. The fastener of claim 3 wherein the rows are equally spaced about the circumference of the shank.
5. The fastener of claim 4 wherein the rows are longitudinally staggered such that the peaks
- 20 of one row are in longitudinal alignment with the valleys of adjacent rows.
6. The fastener of claim 3 wherein the rows of knurls extend substantially the entire length of the shank.
7. The fastener of claim 1 wherein the cross-sectional profile in the lateral plane of the at least one row has wider and narrower areas between laterally opposing arcuate sides.
- 25 8. A fastener, comprising;

a substantially cylindrical fastener having a top, a bottom, and a central longitudinal axis extending from the top to the bottom;

a head at the top being the largest diameter of the fastener;

a shank extending immediately downward from the head, said shank having a plurality of rows of splines extending radially therefrom; and

Wherein each row of splines follows a zig-zag path in the longitudinal direction and all the rows are of the same radial height with a triangular cross-sectional profile having straight
5 sides and a peak defining the maximum height of the rows.

9. The fastener of claim 2 wherein the longitudinal alignment is in a straight line.

10. The fastener of claim 2 wherein the longitudinal alignment follows a serpentine path.

11. The fastener of claim 9 or claim 10 wherein the cross-sectional profile in the lateral plane has undulating arcuate sides with intermediate narrow sections in between the knurls.

10