CLAIMS

1. An externally threaded fastener (20), the fastener comprising:

a thread profile (26) being defined by three zones;

wherein an outer zone profile (B) is defined as having thread profile faces (45,45a) constructed as parabola ;

wherein a central zone (A) is defined as having profile faces constructed as sides of a trapezium (35,35a,36,36a);

wherein an inner zone (C) is defined as having profile faces (51,51a) constructed as hyperbola; wherein the profile form is developed around a selected basic pitch diameter (31), the pitch diameter being a selected nominal basic pitch diameter to which is added a selected fundamental deviation, a height of the sides of the trapezium is spaced equally above and below the pitch diameter;

wherein the outer zone parabola is constructed from the upper position (35,35a) of the central trapezium toward the major, outer, diameter (42,42a) of the screw/bolt thread, wherein at the outer diameter there is a tip width (40) at which the parabola terminates, wherein the inner zone hyperbola is constructed from the inner position (36,36a) of the central trapezium and extends toward the minor thread diameter (52,52a); and wherein the inner hyperbola extends to the centre between the threads at the point where it contacts the thread minor diameter.

2. A threaded fastener in accordance with Claim 1 where the height of the central trapezium is 1.3 times the manufacturing tolerance chosen for the basic pitch diameter plus the selected fundamental deviation.

3. A threaded fastener in accordance with Claim 1 where the height of the central trapezium lies within a range of 1.3 to 2 times the tolerance chosen for the basic pitch diameter plus the selected fundamental deviation.

4. A threaded fastener in accordance with claims 1, 2 and /or 3, where the tip width of the thread profile at its major diameter is 0.10 times the selected thread axial pitch.

5. A threaded fastener in accordance with claims 1,2 and/or 3 where the tip width of the thread profile at its major diameter lies within the range of 0.100 to 0.125 times the selected thread axial pitch.

6. A threaded fastener in accordance with claims 1, 2 or 3 and 4 or 5, where the parabola developed for the outer profile of the thread is generated between the outer point of the tip width and the upper/ outer point of the central trapezium.

7. A threaded fastener in accordance with claim 1 where the inner profile of the thread is developed as a hyperbola between the lower/outer point of the central trapezium and the mid position between adjacent threads where that mid position meets the minor thread diameter.

8. A threaded fastener in accordance with claim 1 where the rectangle developed to construct the parabola for the outer surface adjacent to the tip is parallel to the face of the central trapezium.

9. A threaded fastener in accordance with claim 1 where the rectangle to construct the root hyperbola has vertical sides that are perpendicular to the axis of the fastener.