CLAIMS

What is claimed is:

1. A mattress innerspring comprising:

an innerspring formed by a plurality of springs connected together in an array wherein the springs are arranged in rows and columns, each spring having a body with a first end and a second end, the body of each spring being generally cylindrical and having a longitudinal axis and an outer diameter, the springs being spaced apart in the rows and columns and connected together in a spaced apart arrangement with each spring being spaced from each adjacent spring in the array;

at least one innerspring dampening insert located in the innerspring in spaces between springs of the innerspring, the innerspring dampening insert having an upper lateral member, a lower lateral member parallel and spaced apart from the upper lateral member and a transverse member which extends between and bisects the upper and lower lateral members;

wherein the upper lateral member contains an arched upper surface and the lower lateral member contains an arched lower surface; and

wherein the upper and lower lateral members extend between and into and at least partially intersect a longitudinal axis of two adjacent springs of the innerspring.

2. The mattress innerspring of claim 1, wherein the at least one innerspring dampening insert is positioned within the spaces between springs of the innerspring in a slanted orientation.

3. The mattress innerspring of claim 1, wherein each of the plurality of springs are reverse coil head (RCH) type coils.

4. The mattress innerspring of claim 1, wherein a height dimension of the at least one innerspring dampening insert is in an approximate range of between 57 and 60 mm.

5. The mattress innerspring of claim 1, wherein a width dimension of the at least one innerspring dampening insert is in an approximate range of between 90.5 and 94.2 mm.

6. The mattress innerspring of claim 1, wherein three innerspring dampening inserts are located in an innerspring in a generally U-shaped configuration.

7. The mattress innerspring of claim 1, wherein a first innerspring dampening insert is positioned along a length of a first side of the innerspring, a second innerspring dampening insert is positioned parallel to the first innerspring dampening insert and along the length of a second side of the innerspring and a third innerspring dampening insert is positioned perpendicular to both the first and second innerspring dampening inserts along the width of a third side of the innerspring.

8. The mattress innerspring of claim 7, wherein the first and second innerspring dampening inserts are approximately 57.25 inches long and the third innerspring insert is approximately between 35 and 57.25 inches long.

9. The mattress innerspring of claim 1 having at least two innerspring dampening inserts positioned parallel to each other within the innerspring.

10. The mattress innerspring of claim 9, wherein the at least two innerspring dampening inserts are positioned proximate to opposing edges of the innerspring.

11. The mattress innerspring of claim 7, wherein the first, second and third innerspring dampening inserts are positioned proximate to opposing edges of the innerspring.

12. A mattress innerspring comprising:

a plurality of helical form coils interconnected in an array in which the coils are generally aligned in rows and columns, each of the coils having a generally cylindrical coil body formed by helical turns of wire with openings between each of the helical turns of wire, and first and second ends to the coil body also formed by the wire, each of the coil bodies being spaced apart in the array;

at least one innerspring insert located between and engaged with two or more of the coils of the innerspring, the at least one innerspring insert having a lower lateral member, a vertical member which is perpendicular to and bisects the lower lateral member and a lateral extension which extends outward from one side of the vertical member;

wherein the lower lateral member extends between and into and at least partially intersects a longitudinal axis of two adjacent coils in the innerspring, the lateral

extension extends into the body of one of the two adjacent coils, and the vertical member is in contact with the two adjacent coils.

13. The mattress innerspring of claim 12, wherein the plurality of helical form coils are two-tier RCH coils.

14. The mattress innerspring of claim 12, wherein the plurality of helical form coils are asymmetrical.

15. The mattress innerspring of claim 12, wherein the at least one innerspring insert is approximately between 72.5 and 77.5 mm wide.

16. The mattress innerspring of claim 12, wherein the at least one innerspring insert is approximately between 44.5 and 49.5 mm in length.

17. The mattress innerspring of claim 12, wherein the at least one innerspring insert is made of polyethylene.

18. The mattress innerspring of claim 12, wherein the at least one innerspring insert has a density of approximately 1.25 lb/ft^3.

19. The mattress innerspring of claim 12, wherein there are at least two innerspring inserts that are positioned parallel to each other within the innerspring.

20. The mattress innerspring of claim 12, wherein there are at least three innerspring inserts that are positioned in a generally U-shaped configuration within the innerspring.

21. The mattress innerspring of claim 1, wherein a cross-sectional configuration of the at least one innerspring dampening insert conforms to one or more turns of a spring of the innerspring.

CLAIMS

What is claimed is:

1. A mattress innerspring comprising:

an innerspring formed by a plurality of springs connected together in an array wherein the springs are arranged in rows and columns, each spring having a body with a first end and a second end, the body of each spring being generally cylindrical and having a longitudinal axis and an outer diameter, the springs being spaced apart in the rows and columns and connected together in a spaced apart arrangement with each spring being spaced from each adjacent spring in the array;

at least one innerspring dampening insert located in the innerspring in spaces between springs of the innerspring, the innerspring dampening insert having an upper lateral member, a lower lateral member parallel and spaced apart from the upper lateral member and a transverse member which extends between and bisects the upper and lower lateral members;

wherein the upper lateral member contains an arched upper surface and the lower lateral member contains an arched lower surface; and

wherein the upper and lower lateral members extend between and into and at least partially intersect a longitudinal axis of two adjacent springs of the innerspring.

2. The mattress innerspring of claim **1**, wherein the at least one innerspring dampening insert is positioned within the spaces between springs of the innerspring in a slanted orientation.

3. The mattress innerspring of claim **1**, wherein each of the plurality of springs are reverse coil head (RCH) type coils.

4. The mattress innerspring of claim **1**, wherein a height dimension of the at least one innerspring dampening insert is in an approximate range of between 57 and 60 mm.

5. The mattress innerspring of claim **1**, wherein a width dimension of the at least one innerspring dampening insert is in an approximate range of between 90.5 and 94.2 mm.

6. The mattress innerspring of claim 1, wherein three innerspring dampening inserts are located in an innerspring in a generally U-shaped configuration.

7. The mattress innerspring of claim 1, wherein a first innerspring dampening insert is positioned along a length of a first side of the innerspring, a second innerspring dampening insert is positioned parallel to the first innerspring dampening insert and along the length of a second side of the innerspring and a third innerspring dampening insert is positioned perpendicular to both the first and second innerspring dampening inserts along the width of a third side of the innerspring.

8. The mattress innerspring of claim 7, wherein the first and second innerspring dampening inserts are approximately 57.25 inches long and the third innerspring insert is approximately between 35 and 57.25 inches long.

9. The mattress innerspring of claim 1 having at least two innerspring dampening inserts positioned parallel to each other within the innerspring.

10. The mattress innerspring of claim 9, wherein the at least two innerspring dampening inserts are positioned proximate to opposing edges of the innerspring.

11. The mattress innerspring of claim 7, wherein the first, second and third innerspring dampening inserts are positioned proximate to three edges of the innerspring.

12. A mattress innerspring comprising:

a plurality of helical form coils interconnected in an array in which the coils are generally aligned in rows and columns, each of the coils having a generally cylindrical coil body formed by helical turns of wire with openings between each of the helical turns of wire, and first and second ends to the coil body also formed by the wire, each of the coil bodies being spaced apart in the array;

at least one innerspring insert located between and engaged with two or more of the coils of the innerspring, the at least one innerspring insert having a lower lateral member, a vertical member which is perpendicular to and bisects the lower lateral member and a lateral extension which extends outward from one side of the vertical member;

wherein the lower lateral member extends between and into and at least partially intersects a longitudinal axis of two adjacent coils in the innerspring, the lateral extension extends into the body of one of the two adjacent coils, and the vertical member is in contact with the two adjacent coils.

13. The mattress innerspring of claim **12**, wherein the plurality of helical form coils are two-tier RCH coils.

14. The mattress innerspring of claim **12**, wherein the plurality of helical form coils are asymmetrical.

15. The mattress innerspring of claim **12**, wherein the at least one innerspring insert is approximately between 72.5 and 77.5 mm wide.

16. The mattress innerspring of claim **12**, wherein the at least one innerspring insert is approximately between 44.5 and 49.5 mm in length.

17. The mattress innerspring of claim **12**, wherein the at least one innerspring insert is made of polyethylene.

18. The mattress innerspring of claim **12**, wherein the at least one innerspring insert has a density of approximately 1.25 lb/ft^3.

19. The mattress innerspring of claim **12**, wherein there are at least two innerspring inserts that are positioned parallel to each other within the innerspring.

20. The mattress innerspring of claim **12**, wherein there are at least three innerspring inserts that are positioned in a generally U-shaped configuration within the innerspring.

21. The mattress innerspring of claim **1**, wherein a cross-sectional configuration of the at least one innerspring dampening insert conforms to one or more turns of a spring of the innerspring.