What is claimed is:

1. A fastener system for use with a gas turbine engine comprising:

a ceramic tile having a linear coefficient of expansion value of $\alpha 2$;

a spacer having a linear coefficient of expansion value of $\alpha 3$;

a combustor shell having a linear coefficient of expansion value of $\alpha 4$; and

a securing member extending through the ceramic tile, spacer and combustor shell, the securing member having a linear coefficient of expansion value of $\alpha 1$,

wherein the spacer has the linear coefficient of expansion $\alpha 3$ value that is greater than that of the securing member linear coefficient of expansion $\alpha 1$; and

wherein the spacer is positioned between the combustor shell and the ceramic tile, and the spacer contacts a first surface of the ceramic tile and contacts a second surface of the combustor shell, and the spacer extends from the first surface to the second surface.

2. The fastener system as claimed in claim 1, further comprising a retaining member that is secured to the securing member, the retaining member having a linear coefficient of expansion value of $\alpha 5$.

3. The fastener system as claimed in claim 1, wherein the spacer is made of metal.

4. The fastener system as claimed in claim 1, wherein the spacer is a metal washer.

5. The fastener system as claimed in claim 1, wherein the spacer is disposed between the ceramic tile and the combustor shell to form an air space between the ceramic tile and the combustor shell.

6. The fastener system as claimed in claim 1, further comprising an air plenum disposed adjacent the ceramic tile for providing a space of cooled air for the fastener system.

7. The fastener system as claimed in claim 1, wherein the linear coefficient of expansion $\alpha 3$ of the spacer is such that it minimizes loosening of the fastening system during operation of a gas turbine engine.

8. The fastener system as claimed in claim 1, further comprising another securing member for fastening the ceramic tile to the combustor shell.

9. The fastener system as claimed in claim 1, further comprising another ceramic tile, another spacer, and another securing member, said another ceramic tile, another spacer, and another securing member are connected to said combustor shell.

10. The fastener system as claimed in claim 1, wherein said spacer is made of material that permits said spacer to expand to compensate for thermal mismatch of the fastener and the tile.

11. The fastener system as claimed in claim 1, wherein as thermal conditions change in which the fastener system is operating, said spacer expands or contracts to take up space that may occur between the combustor shell and the ceramic tile.

12. The fastener system as claimed in claim 1, wherein the spacer includes an inner radius, the inner radius being larger than an outer radius of the securing member such that a gap is formed between the spacer and the securing member.

13. A fastener for securing a ceramic matrix part in a combustor of a gas turbine comprising:

a metal spacer having a linear coefficient of expansion value of $\alpha 3$;

a threaded metal shaft extending through the spacer, the metal shaft having a linear coefficient of expansion value of $\alpha 1$;

a metal shell of the combustor having a linear coefficient of expansion value of $\alpha 4$ through which the threaded metal shaft extends;

a retaining member having a linear coefficient of expansion value $\alpha 5$ similar to the linear coefficient of expansion value of the threaded metal shaft $\alpha 1$; and

a ceramic matrix part having a linear coefficient of expansion value of $\alpha 2$ that is lower than that of the spacer, the threaded metal shaft extending through the ceramic matrix;

wherein the spacer has the linear coefficient of expansion $\alpha 3$ value that is greater than that of the threaded metal shaft linear coefficient of expansion $\alpha 1$ value; and

wherein the spacer extends from a bottom surface of the ceramic matrix part to a top surface of the metal shell.

14. The fastener as claimed in claim 13, wherein the linear coefficient of expansion value $\alpha 3$ of the spacer is selected from a group of materials having a linear coefficient of expansion value that exceeds the sum of $\alpha 1$ and $\alpha 2$.

15. The fastener as claimed in claim 13, further comprising a gas turbine machine, said gas turbine machine includes a combustor shell and a tile positioned adjacent said metal shell, the fastener of claim 13 is used to secure said tile to said metal shell.

16. The fastener as claimed in claim 15, further comprising a plenum located between said tile and said metal shell, the plenum provides a space for spacer to grow or contract.

17. The fastener as claimed in claim 13, further comprising a gap between the metal spacer and the threaded metal shaft in an area of the threaded metal shaft that is between the ceramic matrix part and the metal shell.

18. A fastener system for securing a ceramic matrix part to a combustor of a gas turbine engine comprising:

a ceramic matrix part having a linear coefficient of expansion value of $\alpha 2$;

a metal spacer having a linear coefficient of expansion value of $\alpha 3$;

a combustor liner having a linear coefficient of expansion value of $\alpha 4$;

a fastener extending through the ceramic matrix part, the spacer, and the combustor liner, the fastener having a linear coefficient of expansion value of $\alpha 1$; and

a retaining member secured to the fastener, the retaining member having a linear coefficient of expansion value of $\alpha 5$;

wherein the metal spacer extends from the ceramic matrix part to the combustor liner and the metal spacer has the linear coefficient of expansion value of $\alpha 3$ greater then the linar coefficient of expansion value of $\alpha 1$ that maintains tight attachment of the ceramic matrix part and the combustor liner.

19. The fastener system for securing a ceramic matrix part to a combustor of a gas turbine engine as claimed in claim 18, wherein the metal spacer compensates for thermal mismatch of the fastener and the ceramic matrix part.

20. The fastener system for securing a ceramic matrix part to a combustor of a gas turbine engine as claimed in claim 18, further comprising a clearance between the metal spacer and the fastener and in an area between the fastener and the combustor liner.

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