CLAIMS

1. A turbomachine geared architecture support assembly, comprising:

an epicyclic gear train; and

a support having a more compliant portion and a less compliant portion; wherein the less compliant portion includes a stop that limits axial movement of a geared architecture within a turbomachine.

2. The turbomachine geared architecture support assembly of claim 1, wherein the more compliant portion and the less compliant portion are portions of a single, monolithic support.

3. The turbomachine geared architecture support assembly of claim 1, wherein the stop comprises a plurality of tangs each extending radially past a portion of a support member that is directly connected to the geared architecture.

4. The turbomachine geared architecture support assembly of claim 3, wherein the plurality of tangs are circumferentially distributed about the axis.

5. The turbomachine geared architecture support assembly of claim 3, wherein the support member is a rigid member.

6. The turbomachine geared architecture support assembly of claim 1, wherein the less compliant portion is an annulus.

7. The turbomachine geared architecture support assembly of claim 1, wherein the more compliant portion accommodates some movement of the geared architecture during operation of the turbomachine, the movement relative to other portions of the turbomachine.

8. The turbomachine geared architecture support assembly of claim 1, wherein the less compliant portion couples the geared architecture to a case structure of the turbomachine.

9. The turbomachine geared architecture support assembly of claim 1, wherein the less compliant portion is coupled directly to the case structure.

10. A turbomachine geared architecture support assembly, comprising:

an epicyclic gear train;

a less compliant portion secured relative to a turbomachine engine case; and

a more compliant portion secured relative to the turbomachine engine case and a geared architecture; wherein the less compliant portion includes a stop that limits axial movement of the geared architecture relative to the engine case.

11. The turbomachine geared architecture support assembly of claim 10, wherein the less compliant portion includes separate sections distributed circumferentially about an axis of the turbomachine.

12. The turbomachine geared architecture support assembly of claim 11, wherein each of the separate sections includes radially extending portions that are configured to extend radially past a member that moves with the geared architecture.

13. The turbomachine geared architecture support assembly of claim 12, wherein the radially extending portions extend from axially extending portions of the separate sections.

14. The turbomachine geared architecture support assembly of claim 12, wherein axially extending portions extend further circumferentially than the radially extending portions.

15. The turbomachine geared architecture support assembly of claim 10, wherein the more compliant portion is an annulus.

16. The turbomachine geared architecture support assembly of claim 10, wherein the more compliant portion is secured directly to a geared architecture support member.

17. The turbomachine geared architecture support assembly of claim 10, wherein the less compliant portion and the more compliant portion are axially aft the geared architecture relative to a direction of flow through the turbomachine.

18. A method of supporting a geared architecture in a turbomachine, comprising:

using a relatively compliant support arm to permit movement of a geared architecture relative to other portions of a turbomachine; and

using a relatively rigid support arm to limit movement of the geared architecture in an axial direction; wherein

the geared architecture includes an epicyclic gear train.

19. The method of claim 18, wherein the relatively compliant support arm and the relatively rigid support arm are axially aft the geared architecture relative a direction of flow through the turbomachine.

20. The method of claim 18, wherein the compliant support arm and the rigid support arm are portions of the same monolithic support assembly.

21. The method of claim 18, wherein the relatively rigid support arm limits movement during an extreme event.

CLAIMS

1. A turbomachine epicyclic gear train support assembly, comprising:

an epicyclic gear train; and

a support having a more compliant portion and a less compliant portion;

wherein the less compliant portion includes a stop that limits axial movement of the epicyclic gear train within the turbomachine, the stop configured to be spaced from a rigid member during normal operation of the turbomachine that includes the epicyclic gear train, the stop further configured to contact the rigid member during abnormal operation of the turbomachine to limit the axial movement.

2. The turbomachine epicyclic gear train support assembly of claim 1, wherein the more compliant portion and the less compliant portion are portions of a single, monolithic support.

3. The turbomachine epicyclic gear train support assembly of claim 1, wherein the stop comprises a plurality of tangs each extending radially past a portion of a support member that is directly connected to the epicyclic gear train.

4. The turbomachine epicyclic gear train support assembly of claim 3, wherein the plurality of tangs are circumferentially distributed about the axis.

5. The turbomachine epicyclic gear train support assembly of claim 3, wherein the support member is a rigid member.

6. The turbomachine epicyclic gear train support assembly of claim 1, wherein the less compliant portion is an annulus.

7. The turbomachine epicyclic gear train support assembly of claim 1, wherein the more compliant portion accommodates some movement of the epicyclic gear train during operation of the turbomachine, the movement relative to other portions of the turbomachine.

8. The turbomachine epicyclic gear train support assembly of claim 1, wherein the less compliant portion couples the epicyclic gear train to a case structure of the turbomachine.

9. The turbomachine epicyclic gear train support assembly of claim 1, wherein the less compliant portion is coupled directly to the case structure.

10. A turbomachine epicyclic gear train support assembly, comprising:

an epicyclic gear train;

a less compliant portion secured relative to a turbomachine engine case;

a more compliant portion secured relative to the turbomachine engine case and the epicyclic gear train; wherein the less compliant portion includes a stop that limits axial movement of the epicyclic gear train relative to the engine case, and

wherein the less compliant portion and the more compliant portion are portions of a single, monolithic support.

11. The turbomachine epicyclic gear train support assembly of claim 10, wherein the less compliant portion includes separate sections distributed circumferentially about an axis of the turbomachine.

12. The turbomachine epicyclic gear train support assembly of claim 11, wherein each of the separate sections includes radially extending portions that are configured to extend radially past a member that moves with the epicyclic gear train.

13. The turbomachine epicyclic gear train support assembly of claim 12, wherein the radially extending portions extend from axially extending portions of the separate sections.

14. The turbomachine epicyclic gear train support assembly of claim 12, wherein axially extending portions extend further circumferentially than the radially extending portions.

15. The turbomachine epicyclic gear train support assembly of claim 10, wherein the

more compliant portion is an annulus.

16. The turbomachine epicyclic gear train support assembly of claim 10, wherein the more compliant portion is secured directly to a epicyclic gear train support member.

17. The turbomachine epicyclic gear train support assembly of claim 10, wherein the less compliant portion and the more compliant portion are axially aft the epicyclic gear train relative to a direction of flow through the turbomachine.

18. A method of supporting a epicyclic gear train in a turbomachine, comprising:

using a relatively compliant support arm to permit movement of a epicyclic gear train relative to other portions of a turbomachine; and

using a relatively rigid support arm to limit movement of the epicyclic gear train in an axial direction.

19. The method of claim 18, wherein the relatively compliant support arm and the relatively rigid support arm are axially aft the epicyclic gear train relative a direction of flow through the turbomachine.

20. The method of claim 18, wherein the compliant support arm and the rigid support arm are portions of the same monolithic support assembly.

21. The method of claim 18, wherein the relatively rigid support arm limits movement during an extreme event.