CLAIMS:

1. A process for increasing color quality and thermal stability of a jet fuel, comprising:

providing the jet fuel, wherein the jet fuel ~~is diesel, kerosene, jet fuel, or a combination thereof~~ has an ASTM D86 10% boiling point from about 110°C to about 190°C, an ASTM D86 90% boiling point from about 200°C to about 290°C; and a Saybolt color of not greater than 20; and

contacting the jet fuel with an acidic, ion-exchange resin ~~to increase~~ thereby increasing the color quality of the jet fuel by at least 10% in accordance with ASTM D156 and increasing the thermal stability of the jet fuel by at least 10% in accordance with ASTM D3241;

wherein the provided jet fuel is treated to reduce mercaptan content prior to contact with the acidic, ion-exchange resin.

2. The method of claim 1, wherein the acidic, ion-exchange resin ~~comprises or~~ is a sulfonic or phosphonic ion-exchanged resin.

3. The method of claim 1 ~~or claim 2~~, wherein the acidic, ion-exchange resin is a macro-reticular ion-exchange resin.

4. The method of ~~any one of the previous claims~~ claim 1, wherein the acidic, ion-exchange resin is a copolymer of styrene and divinylbenzene~~, such as a cross-linked styrene and divinylbenzene copolymer~~.

5. The method of claim 1, wherein the acidic, ion-exchange resin is a cross-linked styrene and divinylbenzene copolymer.

~~5.~~6. The method of ~~any one of the previous claims~~ claim 1, wherein the acidic, ion-exchange resin has a concentration of acidic ion-exchange groups of at least about 1 milli-equivalent ~~H+~~ H^+ per gram dry resin.

~~6.~~7. The method of ~~any one of the previous claims~~ claim 1, wherein the

provided jet fuel exhibits a pressure drop of at least ~~about~~ 20 mmHg, according to ASTM D3241.

~~7.~~8. The method of ~~any one of the previous claims~~ claim 1, wherein the provided jet fuel contacts the acidic, ion-exchange resin at an average liquid hourly space velocity from about 0.1 hr^{-1} to about 10 hr^{-1}.

~~8. The method of any one of the previous claims, wherein the provided fuel comprises or is a jet fuel.~~

~~9. The method of any one of the previous claims, wherein the provided fuel has an ASTM D86 10% boiling point from about 110°C to about 190°C, and an ASTM D86 90% boiling point from about 200°C to about 290°C.~~

~~10. The method of any one of the previous claims, wherein the provided fuel has a Saybolt color of not greater than 20.~~

~~11.~~9. The method of ~~any one of the previous claims~~ claim 1, wherein the provided jet fuel is contacted with the acidic, ion-exchange resin at a temperature from about 10°C to about 100°C.

~~12. The method of any one of the previous claims, wherein the provided fuel is treated to reduce mercaptan content prior to contact with the acidic, ion-exchange resin.~~

~~13.~~10. The method of claim ~~12~~ 1, wherein the mercaptan-reduced jet fuel is water washed prior to contact with the acidic, ion-exchanged resin.

~~14.~~11. The method of ~~any one of claims 1-11~~ claim 1, wherein the provided jet fuel is treated to reduce mercaptan content prior to contact with the acidic, ion-exchanged resin by treating with an alkaline composition in the presence of a mercaptan oxidation catalyst to produce a mercaptan-reduced product~~, and the mercaptan-reduced product is then contacted with the acidic, ion-exchanged resin~~.