**Claims**

We claim:

1. A molecular sieve having, in its as-synthesized form and in its calcined form, an X-ray diffraction pattern including peaks having a d-spacing maximum in the range of 14.17 to 12.57 Angstroms, a d-spacing maximum in the range of 12.1 to 12.56 Angstroms, and non-discrete scattering between about 8.85 to 11.05 Angstroms or exhibit a valley in between the peaks having a d-spacing maximum in the range of 10.14 to 12.0 Angstroms and a d-spacing maximum in the range from 8.66 to 10.13 Angstroms with measured intensity corrected for background at the lowest point being not less than 50 % of the point at the same XRD d-spacing on the line connecting maxima in the range of 10.14 to 12.0 Angstroms and in the range from 8.66 to 10.13 Angstroms; and

a composition involving the molar relationship:

$$X_2O_3:(n)YO_2$$

wherein X is a trivalent element comprises at least one of aluminum, boron, iron and gallium, Y is a tetravalent element comprises at least one of silicon and germanium, and n is at least about 10.

2. The molecular sieve of claim 1, in the as-synthesized form, having a formula, on an anhydrous basis and in terms of moles of oxides per n moles of $YO_2$, as follows:

$$(0.005\text{-}1)M_2O:(1\text{-}4)R:X_2O_3:nYO_2$$

wherein M is an alkali or alkaline earth metal, and R is an organic moiety.

3. The molecular sieve of claim 1 ~~or 2~~, wherein said n is from about 10 to about 150.

4. The molecular sieve of claim 1 ~~or 2~~, wherein said n is from about 10 to about 50.

5. The molecular sieve of ~~any one of claims 1 to 5~~ claim 1, wherein X is aluminum and Y is silicon.

6. The molecular sieve of claim 1, having a collidine adsorption capacity of at least 150 μmoles/g.

7. The molecular sieve of claim 1, having a collidine adsorption capacity of at least 250 μmoles/g.

8. A method of manufacturing an as-synthesized crystalline molecular sieve EMM-12, the method comprising the steps of:

(a) providing a mixture comprising EMM-10-P family composition and acidic composition;

(b) treating the mixture under treatment condition to form a product comprising as-synthesized EMM-12; and

(c) recovering the acid treated crystalline molecular sieve.

~~wherein said EMM-10-P family composition comprises EMM-10-P, said acidic composition comprises 1N nitric acid aqueous solution, said spacing agent comprises diethoxydimethylsilane, said treatment conditions comprise a temperature in the range of 90-170°C and a time in the range of 1 to 24 hours.~~

9. The method of claim 8, wherein said mixture of step (a) further comprising a spacing agent.

10. The method of claim 9, wherein said EMM-10-P family composition comprises EMM-10-P, said acidic composition comprises 1N nitric acid aqueous solution, said spacing agent comprises diethoxydimethylsilane, said treatment conditions comprise a temperature in the range of 90-170°C and a time in the range of 1 to 24 hours.

~~10.~~11. A method of manufacturing a calcined crystalline molecular sieve EMM-12, the method comprising the step of calcining said as-synthesized crystalline molecular sieve EMM-12 of claim 8 under calcining conditions.

~~11.~~12. A hydrocarbon conversion process comprising the step of contacting a hydrocarbon feedstock with said crystalline molecular sieve EMM-12 of claim 1 under hydrocarbon conversion conditions.