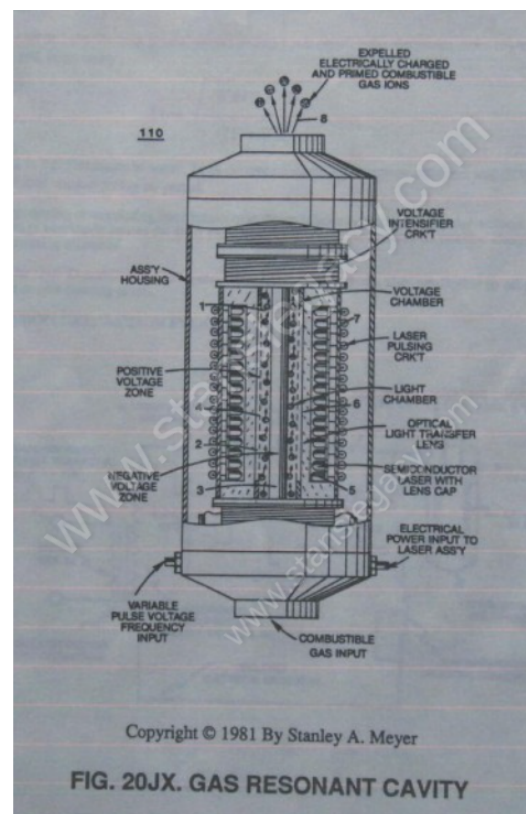
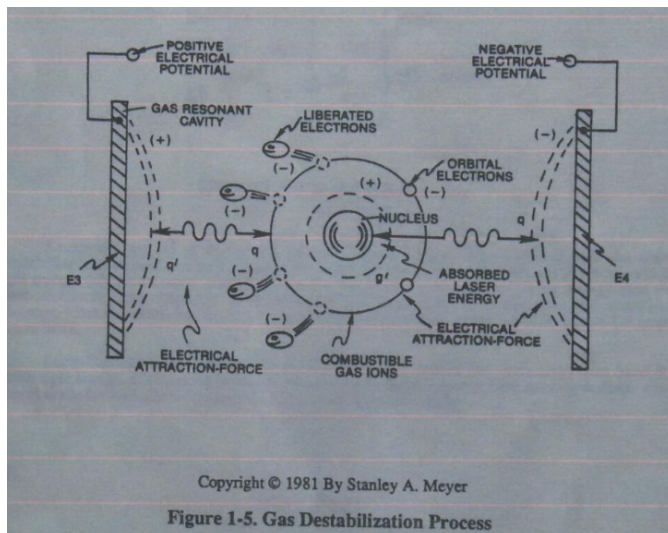
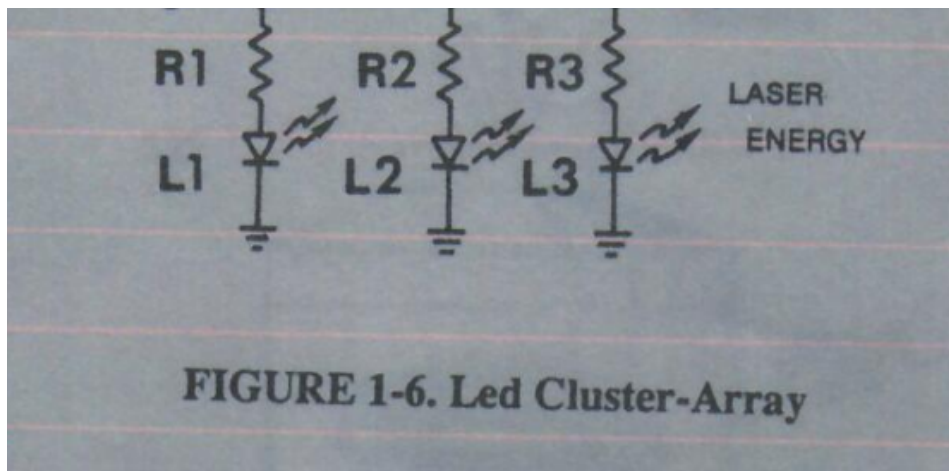


# LASER INTERACTION

**Laser energy** ( $v$ ) of Figure 1-1 is now injected into or superimposed onto the **Gas Destabilization Process** to help promote the **Electron Extraction Process** *since the absorbed light energy (electromagnetic energy) forces the gas atom electrons to an higher energy state or attraction-force* ( $q_2$ ) between the orbital electrons and the nucleus...

weakening the **electrical attraction-force** ( $qq'$ ) between the orbital electrons and the nucleus, as illustrated in Figure 1-5 as to Figure 20JX.





Light-emitting diodes

arranged in an **Cluster-Array** provides and emits an narrow band of visible light energy, as illustrated in Figure 1-6 as to Figure 20XX.

Laser or light intensity is linear with respect to the forward current through the LEDS, and, is determined by

$$R_s = \frac{V_{in} - V_{led}}{I_{led}}$$

Where

$I_{led}$  is the specified forward current (typically 20ma. per diode);

$V_{led}$  is the LED voltage drop (typically 1.7 volts for red emitters).

Ohm's Law for LED circuit in parallel array, and, is given by

$$P_{watts} = V_{cc} I_t$$

Where

$I_t$  is the forward current through LED cluster-Array;

$V_{cc}$  is volts applied (typically 5 volts).

