

ON-SITE WASTE RECOVERY FOR SOLID STATE MANUFACTURING PROCESS**Abstract of the Disclosure**

Processes and systems are presented providing for a waste recovery of gases and liquids useful in a variety of processes. For example, a waste stream from a CVD chamber is wet scrubbed with calcium hydroxide to produce calcium fluoride, the calcium fluoride reacted with sulfuric acid to produce hydrogen fluoride (HF) gas which may then be routed either on-site or off-site to a liquid chemical generator wherein the gaseous HF is mixed with ultra-high purity water to form ultra-high purity aqueous hydrogen fluoride. The insoluble gases from the wet scrubber may be routed to a recovery unit where other useful gases may be separated from carrier gases.

(Figure 2)