



Friday 7 March

Cxxxx Jxxxxx  
123 xxxxxx Street  
San Francisco, CA 941xx

Dear Cxxxx

Revision to valve concept xxxx

This is a second version of the concept, this time using a flap valve and no ball bearing. Not only does this remove that component, but assembly is simpler. The passthrough snap fixings to hold the top elastomeric parts are simple but they will work, and can be tidied up later if the concept holds up in test. This will be the same size as the previous one. Please note that the main elastomeric part is shown in its undistorted geometry, and will in use be stretched over the sharp lip of the main external cutter part underneath. As suction is applied the membrane will lift off the lip and air will flow out of the bag through the surrounding holes. When suction is released the valve will snap back – partly through elastic tension and partly through air pressure – tightly back on the sharp lip. When the cap is put on it will apply additional mechanical pressure to the membrane, sealing it tightly.

A 3D PDF is on the next page.

Best – Chris

