

ABSTRACT

REFILL UNIT FOR SIMULTANEOUSLY ENGAGING WITH, AND OPENING INLET VALVE TO, AN INK CARTRIDGE

A refill unit 155 for refilling a ink storage compartment 46 that supplies ink to a printhead 22. The ink storage compartment 46 having an interface 61 for receiving the refill unit 155. The interface 61 having an inlet valve 18 biased to its closed configuration. The refill unit 155 has an inlet valve actuator 152 for opening the inlet valve 18 as the refill unit 155 engages the ink interface 61 so that the ink in the body is in fluid communication with the ink storage compartment 46.

By configuring the refill unit so that it opens the inlet valve on the ink cartridge at the same time that it docks with the cartridge, the risk of dust or other contaminants getting into the cartridge is reduced. This improves the performance and operational life of the printhead nozzles.

Figure 1