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## (54) DUST-JET

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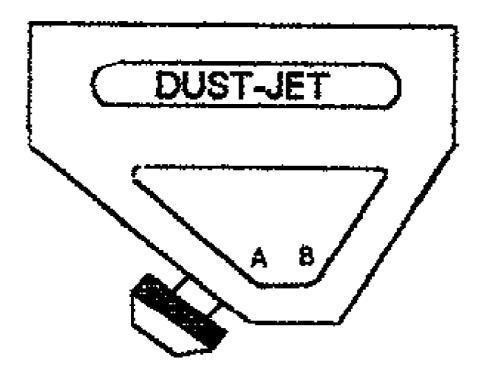
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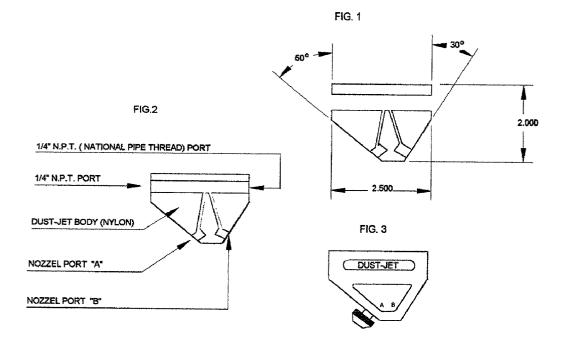
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#### (57) ABSTRACT

An pneumatic apparatus that attaches to pneumatic sanding tools that when In use provides a directed stream of air that creates a cushion of air between the sand paper and the work surface helping to keep the sand paper, the work surface and the worker clean from dust and debris.





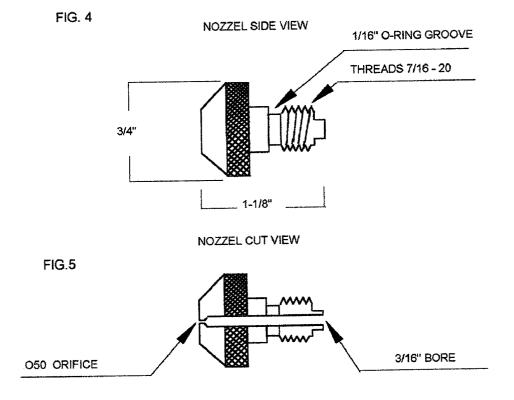


Fig. 6 3-D VIEW

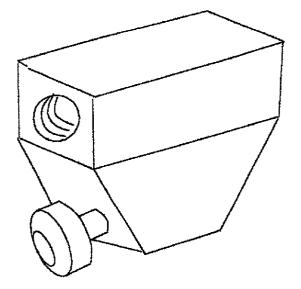
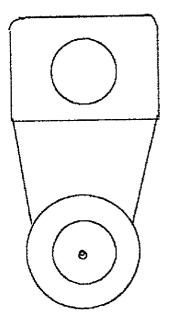


Fig. 7 **Front View** 



#### **DUST-JET**

#### FIELD OF THE INVENTION

**[0001]** This invention relates generally to the pneumatic tool industry and more specifically to pneumatic sanding tools, a method for keeping sand paper and working surfaces clean.

### BACKGROUND OF THE INVENTION

[0002] Power sanding is used in numerous industries such as wood working, auto body repair. Boat manufacturing and various types of fabrication. One of the problems is that the sand paper clogs up causing the worker to stop what they are doing to clean the sanding disk/paper this causes a loss of productivity the worker has to do this about ever 30 seconds to one minute. A large percentage of the time the worker will simply put a new piece of paper on the sander instead of taking the time to clean the clogged piece. This results in wasted materials.

**[0003]** Another problem is that while sanding there is dust and debris that builds up on the work surface, this makes it hard for the worker to see what they are doing, the worker has to stop what they are doing and clean the area, causing down time.

#### SUMMARY OF THE INVENTION

**[0004]** The present invention is a pneumatic apparatus and method for helping to keep sand paper clean that is used on pneumatic powered sanders. The present invention supplies a jet steam of air that creates turbulent air under the sand paper thus creating a cleaning affect. The stream of air also helps to keep the immediate work area clean thus providing the worker with a better view of the work surface. The present invention also moves the dust and debris away from the worker helping to keep the worker clean.

**[0005]** The present invention includes a nylon injection molded body with threaded ports, a nozzle that is machined from brass that has a orifice that directs air towards the work surface and a nylon injection molded plug the seals the unused port.

**[0006]** The present invention has a "A" port and a "B" port, these ports are drilled at different angles so that the apparatus can be mounted to most of the pneumatic tool on the market Today.

**[0007]** With the present invention installed on a pneumatic sanding tool the sandpaper can last up to four times as long saving on materials and down time. Also the dust and debris is blown a way from the worker thus improving the workers vision of the surface and keeping the worker cleaner.

#### OBJECT OF THE INVENTION

**[0008]** The principle object of the present invention is to provide a steam of air that creates turbulent air underneath the sand paper on pneumatic sanding tools. This steam of air continuously cleans the sand paper while in use.

**[0009]** Another object of the present invention is to keep the immediate work surface free of dust and debris so the worker can see more clearly the surface that is being sanded.

**[0010]** Another object of the invention is that by providing the worker the means to keep his sand paper and work

surface clean the worker does not have to stop as often to change sand paper or clean his work surface. Thus reducing work down time.

**[0011]** Another object of the invention is to provide a steam of air that directs the air in such a manor that it moves the dust and debris away from the worker thus keeping the worker cleaner.

#### DESCRIPTION OF DRAWINGS

**[0012] FIG. 1** This is a cut side view of the Dust Jet body showing the two angles where the two Nozzle ports are located. This view also shows the size of the body.

**[0013]** FIG. 2 This is a cut side view of the Dust Jet body describing the openings The <sup>1</sup>/<sub>4</sub>" n.p.t. port is used for the supply air and tool air. Nozzle port "A" is located on the 50 degree side, nozzle port "B" is located on the 30 degree side

[0014] FIG. 3 This is a side view of the Dust Jet with nozzle installed

**[0015] FIG. 4** This is a side view of the nozzle showing the o-ring groove and thread size.

**[0016] FIG. 5** this is a cut side view of the nozzle showing the bore and orifice.

[0017] FIG. 6 This is a 3-D view of the Dust Jet

[0018] FIG. 7 This is a front view of the Dust Jet.

#### SUMMARY OF THE ACHIEVMENT OF THE OBJECTS OF THE INVENTION

**[0019]** From the forgoing it is readily apparent that I have invented an pneumatic apparatus That provides a method for keeping sand paper clean while being used on pneumatic sanding tools.

**[0020]** The present invention also provides a way to keep the immediate work area and the worker clean from dust and debris.

**[0021]** It is to be understood that the forgoing description and specific embodiments are merely illustrative of the best mode of the invention and the principles thereof, and that Various modifications and additions may be made to the apparatus by those skilled in the art, without departing from the spirit and scope of this invention which is intended to be limited only by the scope of the appended claims.

What is claimed is:

1. A pneumatic apparatus comprising:

A main body that is injection molded having two ¼" n.p.t. ports and two molded 7/16" nozzle ports and a nozzle that has a orifice that helps to create a stream of air that helps to keep sand paper clean when installed on a pneumatic sanding tool

**2**. A pneumatic apparatus that when in use will help keep dust and debris away from the worker and the work surface making the area more visible.

**3**. A main body that has an "A" port and a "B" port in which the nozzle can be installed in either port according to which port works best with the tool that is being used.

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