

## ATMOSPHERIC PRESSURE ION SOURCE WITH EXHAUST SYSTEM

### ABSTRACT OF THE DISCLOSURE

**[0062]** An atmospheric pressure ion source, employing the principle of electrospray ionization, chemical ionization, or photo-ionization, comprises a spray probe for spraying a liquid into an ionization chamber and has an exhaust port through which residual spray mist and waste gas, such as evaporated solvent, are extracted. The ion source further comprises an exhaust system comprising a conduit which is connected to the exhaust port. The conduit has a transition from a first cross-section to a second cross section at a point downstream of the exhaust port wherein the second cross section is reduced in relation to the first cross section. Gas is injected via a gas injector into the conduit in a region of the transition to create a low pressure region that removes unwanted material from the chamber.

Fig. 1