



## ABSTRACT OF THE DISCLOSURE



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Method and system for manufacturing III-V Group compound semiconductor  
and III-V Group compound semiconductor

In a semiconductor manufacturing system for manufacturing compound semiconductor by MOCVD, a lead-in member is provided for guiding feed gas supplied from a feed gas supply unit onto the surface of a semiconductor substrate disposed in a reactor, a main body of the lead-in member is constituted as a hollow member to form a feed gas guide passage for conducting the feed gas in an prescribed direction and is formed with multiple orifices, and the feed gas in the feed gas guide passage is jetted from the orifices in a direction perpendicular to the prescribed direction so that the semiconductor substrate is bathed in a feed gas flow of uniform amount jetted from the lead-in member in this manner. Furthermore, a pressure differential produced between the inner side and outer side of the nozzle member enables the feed gas jetted from the nozzle member to flow over the whole surface of the substrate at a uniform flow rate. The multiple feed gases are led to the vicinity of the substrate individually and the blow gas blows the multiple feed gases toward the substrate to favorably from desired thin film crystal.

(Figure 3)