CLAIMS

1. An inlet assembly (780A; 780B ) for an abatement apparatus (10; 10A; 10B) for treating an effluent stream from a semiconductor processing tool, said inlet assembly comprising:

a plurality of combustion chamber modules (30; 30A; 30B), each defining a corresponding plenum configured to supply combustion reagents to its corresponding combustion chamber,

a common head defining a plurality of galleries configured to supply said combustion reagents, each of said plurality of combustion chamber modules having a corresponding mount (50; 50A; 50B) configured to interface with a corresponding one of the plurality of galleries of said common head (150; 150A) and wherein each corresponding mount comprising a plurality of corresponding feed apertures positioned for fluid communication of said combustion reagents between that corresponding one of the plurality of galleries and a corresponding plenum (100; 100A; 100B).

2. The inlet assembly of claim 1, wherein each corresponding plenum (100; 100A; 100B) surrounds its corresponding combustion chamber (120; 120A; 120B) and said corresponding feed apertures are located to overlie said corresponding plenum.

3. The inlet assembly of claim 1 or 2, wherein said corresponding feed apertures (760A, 770A) are located to extend around a perimeter of said corresponding mount.

4. The inlet assembly of any preceding claim, wherein said corresponding mount of at least one combustion chamber module is configured to interface with a plurality of the galleries (790A) of said common head, said corresponding mount comprising a plurality of corresponding feed apertures (810A; 810B) positioned for fluid communication of said combustion reagents between those galleries and its corresponding plenum.

5 The inlet assembly of any preceding claim, wherein each combustion chamber module is configured to receive at least one corresponding effluent stream nozzle extending from said common head and said feed apertures are located to avoid a position of each effluent stream nozzle.

6. The inlet assembly of any preceding claim, wherein each corresponding mount defines at least one corresponding effluent stream nozzle aperture positioned to receive a corresponding effluent stream nozzle.

7. The inlet assembly of any preceding claim, wherein each corresponding mount comprises at least one corresponding effluent stream nozzle seal positioned to surround each corresponding effluent stream nozzle, preferably wherein said corresponding feed apertures are located to avoid each corresponding effluent stream nozzle seal (840A; 840B).

8. The inlet assembly of any preceding claim, wherein each corresponding mount comprises a corresponding perimeter seal (850A; 850B) configured to contain said combustion reagents.

9. The inlet assembly of any preceding claim, wherein said common head is configurable to removably provide at least one additional effluent stream nozzle extending from said common head for enhanced combustion chamber modules.

10. The inlet assembly of any of claims 1-8, wherein at least one combustion chamber module is an enhanced combustion chamber module, said corresponding mount is configured to receive at least one corresponding additional effluent stream nozzle extending from said common head and said corresponding feed apertures are located to avoid a position of each additional effluent stream nozzle, preferably wherein said corresponding mount of said at least one enhanced combustion chamber module is at least one of:

configured to receive a plurality of effluent stream nozzles extending from said common head; and

configured to interface with the plurality of galleries of said common head.

11. The inlet assembly of claim 10, wherein at least one combustion chamber module is other than said at least one enhanced combustion chamber module and said corresponding perimeter seal deviates to avoid a location of said at least one corresponding additional effluent stream nozzle.

12. The inlet assembly of claim 11, wherein said corresponding mount of said other than said enhanced combustion chamber module is at least one of:

configured to receive a single corresponding effluent stream nozzle extending from said common head; and

configured to interface with a single gallery of said common head.

13. The inlet assembly of claim 9, wherein each perimeter seal follows a joggling path to avoid said at least one additional effluent stream nozzle.

14. The inlet assembly of any one of claims 8 to 13, wherein said corresponding feed apertures are at least one of:

positioned to avoid said corresponding perimeter seal; and

located follow a deviating path extending around said corresponding perimeter of said corresponding mount.

15. The inlet assembly of any preceding claim, comprising said common head having a plurality of inlets configured to feed said effluent stream combustion reagents to the corresponding plurality of galleries.