What is claimed is:

1. A drilling system ~~for performing a drilling operation~~, comprising a generally cylindrical body member, a cutting head at the front end of the body member having at least one cutting edge formed in association therewith~~thereon~~, the body member forming a hollow shaft adjacent the cutting head with at least one opening in the body member adjacent the cutting head, a coolant adapter provided on the body member to provide a coolant fluid through at least one sealed channel in the body member exterior to the hollow shaft, to provide the coolant fluid to the area of the at least one cutting edge, and a vacuum connected to the hollow shaft to apply vacuum pressure through the at least one opening and hollow shaft.

2. The drilling system of claim 1 wherein the at least one sealed channel is formed by a coolant containment sleeve mated to a hollow inner body ~~and coolant inducer sleeve~~ to create at least one ~~a~~ sealed route for coolant flow to the at least one cutting edge.

~~3. The drilling system of claim 2 wherein the coolant containment sleeve is mated a hollow inner body and coolant inducer sleeve to create a sealed route for coolant flow to the at least one cutting edge.~~

3. The drilling system of claim 2 further comprising a rotary coolant adapter assembled to the outside diameter (OD) of the coolant inducer sleeve through which an external coolant supply is plumbed into the rotary coolant adapter to provide coolant to flow through the sealed coolant containment sleeve mated to the hollow inner body and coolant inducer sleeve.

4. The drilling system of claim 1 wherein the at least one cutting edge is provided by at least one replaceable cutting insert mounted in association with the cutting head.

5. The drilling system of claim 4 wherein the at least one cutting insert includes two cutting edges extending from a position along the rotational axis of the drilling system ~~for double effective cutting~~.

6. The drilling system of claim 1 wherein a plurality of openings are provided on the body member to provide an entrance for chips into the hollow shaft.

7. The drilling system of claim ~~4~~5 wherein at least one opening is provided for each of the cutting edges on the cutting insert.

~~8. The drilling system of claim 4 wherein the at least one cutting insert is replaceable to allow for use of a variety of different cutting insert geometries in conjunction with the body member.~~

8. The drilling system of claim 1 wherein the at least one cutting edge is provided on a replaceable insert and the cutting head has a slotted insert connection for securing the insert in the cutting head.

9. The drilling system of claim 1 wherein the at least one cutting edge has a cutting geometry that creates small segmented chips.

10. The drilling system of claim 1 further comprising a coolant inducer sleeve mated to the hollow shaft and coolant containment sleeve to provide a location for connection of an external coolant supply.

11. A method of performing a drilling operation comprising providing a drilling tool having a cutting head at a front end of the tool having at least one cutting edge associated therewith~~formed thereon~~, and a hollow shaft with at least one opening adjacent the ~~cutting head~~at least one cutting edge, a coolant adapter provided on the body member to provide a coolant fluid through at least one sealed channel in the body member exterior

to the hollow shaft, and coupling a vacuum source to the hollow tube to extract cuttings formed at the cutting head through the at least one opening.

12. The method of claim 11, wherein the at least one sealed channel is formed by a coolant containment sleeve mated to a hollow inner body ~~and coolant inducer sleeve~~ to create a sealed route for coolant flow to the at least one cutting edge.

13. The method of claim 11 the at least one cutting edge is provided by at least one replaceable cutting insert mounted at the cutting head~~, with different cutting geometries provided in association with the replaceable cutting inserts~~.

14. The method of claim 13 wherein the at least one cutting insert includes two cutting edges extending from a position along the rotational axis of the drilling system ~~for double effective cutting~~.

15. The method of claim ~~11~~14 wherein an ~~a plurality of~~ opening~~s~~ ~~are~~ is provided on the body member for each cutting edge to provide an entrance for chips into the hollow shaft.

~~16. The method of claim 15 wherein at least one opening is provided for each cutting edge.~~

16. The method of claim 11 wherein one or more air intake channels are formed on the coolant containment sleeve to provide area for air intake through a bushing and into the hole being drilled.

17. The method of claim 11 wherein the at least one cutting edge has a cutting geometry that creates small segmented chips in conjunction with a positive feed and peck drilling operation.

18. The method of claim 11 further comprising a coolant inducer sleeve mated to the hollow shaft and coolant containment sleeve to provide a location for connection of an external coolant supply.

19. The method of claim 11 further comprising a bushing to guide the drilling system.

~~20. A drilling system for performing a drilling operation, comprising generally cylindrical body member, a cutting head at the front end of the body member having at least one cutting insert with at least two cutting edges extending from a position along the rotational axis of the drilling system for double effective cutting, the body member forming a hollow shaft adjacent the cutting head with at least one opening in the body member adjacent each cutting edge, a coolant adapter provided on the body member to provide a coolant fluid to each cutting edge through at least one sealed channel in the body member exterior to the hollow shaft, to provide the coolant fluid to the area of each cutting edge, and a vacuum source connected to the hollow shaft to apply vacuum pressure through the at least one opening and hollow shaft.~~

20. The drilling system of claim 2, further comprising a wear resistant area on the coolant containment sleeve for use in a bushing.

21. The drilling system of claim 2, further comprising one or more air intake channels formed on the coolant containment sleeve to provide area for air intake through a bushing and into the hole being drilled.

22. The drilling system of claim 1, further comprising one or more coolant ports to provide a direct route for coolant flow into the at least one sealed channel in the body member exterior to the hollow shaft.

23. The drilling system of claim 1 further comprising a bushing to guide the body member.

24. The drilling system of claim 1 wherein the at least one sealed channel in the body member exterior to the hollow shaft controls the flow of coolant to the at least one cutting edge.

25. The drilling system of claim 1 wherein the diameter of the interior chamber of the hollow shaft and at least one opening are sized to accommodate the largest expected chips formed during a drilling operation.