

[0045] Various processes can be performed to complete construction of a combination read/write head. Since these processes are familiar to one skilled in the art they are omitted for purposes of clarity. In addition various modifications will become apparent to one skilled in the which would still be contemplated by the present invention. For example, the lead tabs could be constructed by a number of other methods, such as for example a subtractive method wherein lead tab material is deposited as a full film, covered with a mask, and then selectively removed to create the lead tabs **138**, **140**. Furthermore, the lead tabs could be constructed of several materials and could be constructed of a single material rather than a conductive material covered by a thin mill resistant material. Other embodiments and modification of this invention will no doubt occur to those of ordinary skill in the art in view of these teachings. Therefore, this invention is to be limited only by the following claims, which include all such embodiments and modifications.

What is claimed is:

1. A magnetic head, comprising:

a magnetoresistive layer, having a central active region and first and second laterally opposed end regions terminating in first and second sides;

first and second lead tabs overlaying said magnetoresistive layer at said first and second end regions and terminating at said first and second sides, said lead tabs comprising a material that is relatively resistant to milling, and;

first and second hard bias layers contacting said first and second sides.

2. A magnetic head as set forth in claim 1 wherein said first and second lead tabs comprise Rh.

3. A magnetic head as set forth in claim 1 wherein the first and second lead tabs comprise Ta.

4. A magnetic head as set forth in claim 1 wherein the first and second lead tabs comprise a layer of Rh and a layer of Ta.

5. A magnetic head as set forth in claim 4 wherein the layer of Ta is thinner than the layer of Rh and wherein the layer of Ta is formed on a side of the Ta layer opposite the magnetoresistive layer.

6. A magnetic head as set forth in claim 1 wherein said magnetoresistive sensor has a substantially flat surface that is bounded by said first and second laterally opposed sides and wherein said first and second lead tabs prevent said first and second hard bias layers from contacting said substantially flat surface.

7. A method of manufacturing a magnetic head, comprising:

providing a substrate;

depositing a magnetoresistive material onto said substrate;

forming first and second lead tabs over said magnetoresistive material, said first and second lead tabs defining a space therebetween;

forming a mask, covering at least a portion of said first and second lead tabs and covering said space between said first and second lead tabs;

performing a material removal procedure to remove a portion of said magnetoresistive material not covered by said mask or said first and second lead tabs.

8. A method of manufacturing a magnetic head as set forth in claim 7 wherein said forming first and second lead tabs further comprises:

depositing a layer of electrically conductive material; and

depositing a layer of material that is relatively resistant to said material removal procedure.

9. A method of manufacturing a magnetic head as set forth in claim 7 wherein said forming first and second lead tabs further comprises:

depositing a layer of Rh; and

depositing a layer of Ta over said layer of Rh.

10. A method of manufacturing a magnetic head as set forth in claim 7 wherein said material removal process comprises ion milling.

11. A method of manufacturing a magnetic head, comprising:

providing a substrate;

forming a magnetoresistive layer over said substrate;

forming a first mask having first and second openings defining a distance therebetween;

depositing lead tab material, a portion of said lead tab material being deposited through said openings;

removing said first mask, leaving said portion of said lead tab material that has been deposited through said openings remaining to form first and second lead tabs separated by a space therebetween;

forming a second mask, said second mask covering said space formed between said first and second lead tabs and covering at least a portion of said first and second lead tabs; and

performing a material removal process.

12. A method of manufacturing a magnetic head as set forth in claim 11 wherein said step of depositing lead tab material further comprises:

depositing a layer of electrically conductive material; and

depositing a layer of material that is relatively resistant to said material removal procedure.

13. A method of manufacturing a magnetic head as set forth in claim 11 wherein said forming first and second lead tabs further comprises:

depositing a layer of Rh; and

depositing a layer of Ta over said layer of Rh.

14. A method of manufacturing a magnetic head as set forth in claim 11 wherein said material removal process comprises ion milling.

15. A magnetic data recording device, comprising:

a chassis;

a magnetic media movable within said chassis;

an actuator moveably mounted within said chassis;

a magnetic head mounted to said actuator for movement adjacent to said magnetic medium said magnetic head further comprising: