CLAIMS

What is claimed is:

1. A micro-electro-mechanical (MEMS) package comprising:

a non-magnetic package body comprising:

a floor; and

a wall extending from the floor and surrounding a cavity;

a non-magnetic seal ring formed on an upper edge of the wall;

a MEMS device mounted to the floor via an indium preform; and

a non-magnetic metallic lid hermetically sealed to the package body by the seal ring, the non-magnetic metallic lid comprising a molybdenum substrate coated with layers of copper and palladium.

2. The MEMS package of claim 1 further comprising:

electrical contacts extending through the floor and wire-bonded to the MEMS device; and

external pins formed on the wall and electrically connected with each other via the MEMS device and the electrical contacts.

3. The MEMS package of claim 1 wherein the non-magnetic metallic lid consists of non-magnetic elements.

4. The MEMS package of claim 1 wherein the cavity is filled with clean dry air having an approximately atmospheric oxygen concentration.

5. A micro-electro-mechanical (MEMS) package comprising:

a non-magnetic package body comprising:

a floor; and

a wall extending from the floor and surrounding a cavity;

a non-magnetic seal ring formed on an upper edge of the wall;

a MEMS device mounted to the floor via an indium preform; and

a non-magnetic metallic lid hermetically sealed to the package body by the seal ring, the non-magnetic metallic lid comprising a molybdenum substrate and a gold/tin solder preform that extends around an outer periphery of a sealing surface thereof.

6. The MEMS package of claim 5 wherein the gold/tin solder preform comprises a fillet that extends up over an outer edge of the non-magnetic metallic lid.

7. A micro-electro-mechanical (MEMS) package comprising:

a package body comprising a floor and a wall extending upward therefrom;

a seal ring formed on an upper surface of the wall of the package body;

a lid coupled to the package body via a hermetic seam seal formed between the lid and the seal ring, the lid comprising a non-magnetic metallic lid comprising a molybdenum substrate coated with layers of copper and palladium;

a MEMS device mounted within a hermetically sealed cavity formed between the package body and the lid; and

a low temperature solder coupling the MEMS device to the package body, the low temperature solder comprising indium;

wherein the package body, the seal ring, and the lid consist of non-magnetic elements.