Contactless Rotary Joint – Contactless Sealing system

Keywords: contactless, rotary joint, rotary union, steam joint, sealing, paper, rubber industry

Summary

Our partner, a Hungarian SME operating in the rotary joint industry, has developed an integrated, contactless rotary joint – sealing system. The product is fully developed, available on the market. Our client is looking for partners interested in buying or licensing the IP and know-how, or interested in joint venture possibilities. Partners with investing intents are gladly accepted too.

Challenge to be addressed

The biggest drawback of commonly used rotary joints originates from their feature having frictional sliding faces. This characteristic reduces energy efficiency and generates undesirable heat, which consequently decreases lifetime. These drawbacks represent additional costs and labor force needed to replace the run-down parts. Our clients’ invention is a novel, contactless rotary joint – sealing system, which is capable of eliminating these problems.

Innovation and main advantages of the technology

The main advantages of the technology are long warranty (3 years or more) on the product and the energy saving that it allows. The energy efficiency may be separated into two categories: less electrical energy to run the system and more efficient use of steam or hot oil in cylinders.

The electrical energy saving comes from the NO sliding faces – NO friction part of the patent. As the rotary joint turns freely, initial energy use to start up the machine are lower and because there is no friction, less power is required to keep continuous operation.

The heat factor efficiency comes from the part of the patent. As there is no leakage from the rotary union, a better medium transfer is achieved. This means better insulation, higher temperature in the cylinders, so less steam or hot oil is required (applicable on steam and hot oil use only).

Potential areas of use

The product has a wide range of application as any other standard rotary joint, but the best results on energy saving are shown on steam applications. This makes it a perfect product for paper industry. It also has a great advantage in the processing industry. Other industries that could benefit from it are: steel mills, beverage packing, glass processing, textile making, printing etc.
Benefits

- No sliding faces (no friction)
- Higher energy efficiency (energy saving)
- Heightened safety
- Long warranty (3 years or more)

Stage of development

The product is fully developed, available on the market.

Intellectual property status

Patents are pending for Germany (PAT 085/13/DE-EP) and Europe (EP 14173016.8).

Type of collaboration

Our client is looking for partners interested in buying or licensing the IP and the know-how, or partners interested in joint venture or investing opportunities.

For further information please contact

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