

Technology Offer

Hydraulic pump with forced suction

Summary

A Romanian research institute has developed a radial piston rotative hydraulic pump with forced suction, which can be used in hydraulic oil drive installations. Although the device is only in the concept stage, it will solve the problem of the working fluid suction regardless of its mounting position towards the tank. The research institute is looking for partners in the field of research and production for further development of the product and for technological transfer.

Creation Date	23 June 2014
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Reference	TORO20140618003

Details

Description

The hydraulic pump with forced suction consists of a housing in which there is a rolling track with interior eccentric seat, on which three pairs of radial pistons are mounted, being able to slide by two in opposition by the means of three cylindrical rods, during the spinning of a rotor that contains them, so that while a piston discharges, the other that is oppositely located is forced to suck.

The hydraulic pump with forced suction solves the problem of the working fluid suction regardless of its mounting position towards the tank.

The research institute is looking for research, academic and industrial partners, for research and technical cooperation agreements.

Advantages and Innovations

- simple design;
- very good suction of the working fluid, not depending on the position of the pump in the installation;
- it can function also with roughly filtered oil;
- low cost price for its manufacturing.

Stage of Development

Concept stage

IPR Status

Patents granted

Keywords

Technology

02002009 Machine Tools

Market

08003006 Power transmission equipment (including generators & motors)

NACE

M.72.1.9 Other research and experimental development on natural sciences and engineering

Network Contact

Issuing Partner

NATIONAL INSTITUTE OF RESEARCH AND DEVELOPMENT FOR OPTOELECTRONICS

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Open for EOI : **Yes**

Dissemination

Send to Sector Group

Creative Industries

Client

Type and Size of Organisation Behind the Profile

R&D Institution

Year Established

0

Already Engaged in Trans-National Cooperation

No.

Languages Spoken

English

Client Country

Romania

Partner Sought

Type and Role of Partner Sought

The partners sought are:

- research institutes and universities willing to develop new applications for the product, to test it in laboratory and in real conditions and
- SMEs able to introduce it in the manufacturing process.

Type and Size of Partner Sought

SME 11-50, University, R&D Institution, SME 51-250

Type of Partnership Considered

Technical cooperation agreement
Research cooperation agreement