

## Seal ring and roller bearing unit with seal ring

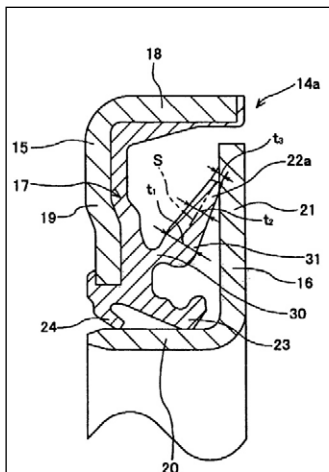
**Applicant:** NSK Ltd, Japan

This patent describes a seal ring, on the oil side of a conventional rotary shaft lip seal, which is claimed to reduce rotating resistance while assuring both durability and sealing integrity. The sealing lip (22a) has a minimum wall thickness part (30) provided near the base. The lip is projected sideways to come into sliding contact with a mating surface. A maximum wall thickness part (31) is arranged adjacent to the tip side of the minimum wall thickness part. Starting at the maximum wall thickness part (31) the lip thickness is gradually reduced toward the tip edge (22a). The ratios of the thicknesses at the parts of the seal lip (22a) are properly controlled.

**Patent number:** WO 03/081096

**Inventor:** T. Takehara

**Publication date:** 2 October 2003



Cross section of the seal arrangement showing the additional inner lip covered by patent WO 03/081096.

## Seal material for a dispensing apparatus

**Applicant:** Bepak Plc, UK

This patent describes an elastomer compound for the seal in a valve for use in a pharmaceutical dispensing device. The material is required to be compatible with new ozone friendly propellants and also meet pharmaceutical hygiene specifications. The elastomeric composition comprises

an isobutylene polymer or co-polymer, a cross-linking agent and an accelerator. The accelerator includes a polysulphide compound derived from a substituted dithiocarbonic acid or derivative.

**Patent number:** WO 03/078538

**Inventors:** D.S. Ohbi and S. Beken

**Publication date:** 25 September 2003

## Method and apparatus for detection and prevention of water in cable joint closures

**Applicant:** Paltexa Ltd, Eire

This patent is particularly concerned with the joints in telecommunication cables of which up to 50% are estimated to leak in some countries. It discloses a series of steps to locate leaks or potential leak sites using a pressure testing apparatus. The leaks

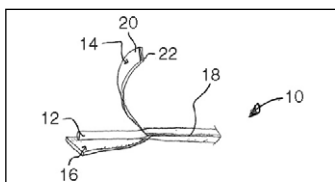
are sealed using a polyurethane sealant that provides a water and gas barrier. The cable joint closure is retested on a regular basis to ensure that there is no recurrence of leaks.

**Patent number:** WO 03/074623

**Inventor:** W.D. Horgan

**Publication date:** 12 September 2003

## Frozen, preformed curable seal



The frozen preformed seal showing removal of the release film.

**Applicant:** Advanced Chemistry and Technology Inc, USA

This patent is intended to overcome the problems associated with the use of manually applied sealants

in the manufacture of airframes. A uniformly premixed sealant is provided as a frozen pre-form that when warmed cures in the pre-form shape. The storage of the preformed sealant formulation under cold conditions arrests the activity of cure catalysts and accelerators. A release film is provided to avoid contact with the preformed sealant during application to a substrate.

**Patent number:** WO 03/080679

**Inventors:** D.L. Mullins, S. Pyrek and D.W. Jordan

**Publication date:** 2 October 2003

## Seal for spindles

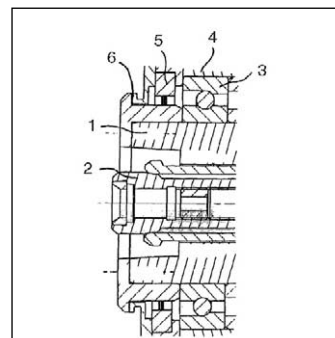
**Applicant:** Siemens AG, Germany

The aim of the invention is to simplify and improve the sealing of spindles that use brush seals (5). The brush seal prevents any lubricant from spreading outside the bearing (3). According to the invention, the brush seal can also be used for rotational introduction elements which are used, for example, to introduce a lubricant into the bore hole of a tool spindle.

**Patent number:** WO 03/081095

**Inventor:** K. Gebert

**Publication date:** 2 October 2003



A brush seal used on a machine tool bearing spindle.

## Flow control/shock absorbing seal

**Applicant/Inventor:** G. Tsaor, USA

This patent describes a flow control/shock absorbing seal. It will absorb the shocks transmitted to the liquids in a container during transportation to prevent leakage and maintain the separation of the liquid and the air chamber in the container. It also controls the rate

of flow of the liquid for the container. It will additionally allow the rate of flow of the liquid from the container to be predetermined and controlled economically and accurately. The liquid may also be forced from the container.

**Patent number:** WO 03/078257

**Publication date:** 25 September 2003

## Magnetic shield package and seal material of magnetic non-volatile memory element

**Applicant:** Sony Corp, Japan

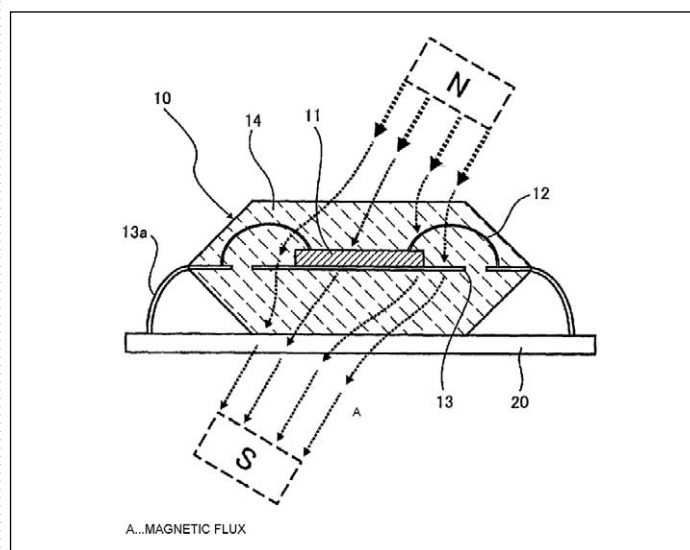
This patent describes a magnetic shield package and seal material of a magnetic non-volatile memory element for improving the record holding reliability of an MRAM element. A resin composite containing soft magnetic material (14) is used for sealing the MRAM element (11) so as to form a magnetic

shield package (10). With this shield it is possible to improve the record holding reliability of the MRAM with respect to external magnetic fields of a wide frequency range.

**Patent number:** WO 03/083939

**Inventors:** K. Okayama, K. Kobayashi and M. Motoyoshi

**Publication date:** 9 October 2003



The arrangement of a seal with improved magnetic shielding capability.