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**Datasheet for the decision  
of 25 July 2008**

**Case Number:** T 1005/07 - 3.2.05

**Application Number:** 01947493.1

**Publication Number:** 1307681

**IPC:** F16N 7/30

**Language of the proceedings:** EN

**Title of invention:**

Arrangement in connection with circulation lubrication system

**Applicant:**

Osakeyhtiö SKF Aktiebolag

**Opponent:**

-

**Headword:**

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**Relevant legal provisions:**

EPC Art. 54, 123(2)

**Relevant legal provisions (EPC 1973):**

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**Keyword:**

"Allowability of amendments (main request, no)"  
"Novelty (auxiliary request, no)"

**Decisions cited:**

-

**Catchword:**

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Case Number: T 1005/07 - 3.2.05

**D E C I S I O N**  
of the Technical Board of Appeal 3.2.05  
of 25 July 2008

**Appellant:** Osakeyhtiö SKF Aktiebolag  
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**Representative:** Valkeiskangas, Tapio Lassi Paavali  
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**Decision under appeal:** Decision of the Examining Division of the  
European Patent Office posted 31 January 2007  
refusing European application No. 01947493.1  
pursuant to Article 97(1) EPC.

**Composition of the Board:**

**Chairman:** W. Zellhuber  
**Members:** P. Michel  
M. J. Vogel

## Summary of Facts and Submissions

I. The appellant (applicant) lodged an appeal against the decision of the Examining Division refusing European patent application No. 01 947 493.1.

The Examining Division considered that claim 1 of a sole request filed on 19 December 2006 did not comply with the requirements of Article 123(2) EPC.

II. The appellant (applicant) requests that the decision under appeal be set aside and that a patent be granted in the following version:

(1) main request: claims 1-3 submitted on 19 December 2006; or

(2) auxiliary request: claims 1-3 submitted as auxiliary request on 25 June 2008.

III. The following documents are referred to in this decision:

D1: US-A-4,420,023

D2: EP-B-0 961 898

D3: "Improved Lube Oil Systems for Paper Machines",  
Harkonen, Machinery Lubrication

IV. Oral proceedings before the Board of Appeal took place on 25 July 2008. The appellant informed the Board by letter dated 25 June 2008 that the oral proceedings would not be attended.

V. Claim 1 of the main request reads as follows:

"1. A circulation lubrication system, including a pressure pipeline configured to provide lubricant to at least one part to be lubricated and a return pipe line configured to return lubricant from at least one part to be lubricated, an intermediate tank (1), inlet channel means (2) for feeding a lubricant into the intermediate tank (1), the inlet channel means (2) being connected to the return pipe line, outlet channel means (3) for removing the lubricant from the intermediate tank (1), the outlet channel means (3) being connected to the pressure pipe line, discharge means (5) for emptying the intermediate tank, and measuring means (6, 7) arranged to start the discharge means (5) when the level of the lubricant in the intermediate tank (1) rises to a predetermined upper limit and to stop the discharge means (5) when the level of the lubricant in the intermediate tank (1) falls to a predetermined lower limit, **characterized** in that the discharge means (5) comprise a pneumatic valve (8) arranged to open, controlled by the measuring means (6, 7), when the level of the lubricant is at the upper limit, and to let pressurized air flow into the intermediate tank (1), whereby the pressurized air is arranged to push the lubricant out of the intermediate tank (1) through the outlet channel means (3) to the pressure pipe line, and to shut and prevent the flow of pressurized air into the intermediate tank (1) when the level of the lubricant falls to the lower limit, and that a counter valve (9) is arranged in the inlet means (2) for the lubricant before the intermediate tank (1), seen from the direction of flow, the counter valve (9) being arranged to prevent the flow of the lubricant out of the intermediate tank (1) through the inlet channel means (2) to the return pipe line."

Claim 1 of the auxiliary request reads as follows:

"1. A circulation lubrication system, comprising an intermediate tank (1), inlet channel means (2) for feeding a lubricant into the intermediate tank (1), outlet channel means (3) for removing the lubricant from the intermediate tank (1), discharge means (5) for emptying the intermediate tank, and measuring means (6, 7) arranged to start the discharge means (5) when the level of the lubricant in the intermediate tank (1) rises to a predetermined upper limit and to stop the discharge means (5) when the level of the lubricant in the intermediate tank (1) falls to a predetermined lower limit, **characterized** in that the discharge means (5) comprise a pneumatic valve (8) arranged to open, controlled by the measuring means (6, 7), when the level of the lubricant is at the upper limit, and to let pressurized air flow into the intermediate tank (1), whereby the pressurized air is arranged to push the lubricant out of the intermediate tank (1) through the outlet channel means (3), and to shut and prevent the flow of pressurized air into the intermediate tank (1) when the level of the lubricant falls to the lower limit, and that a counter valve (9) is arranged in the inlet means (2) for the lubricant before the intermediate tank (1), seen from the direction of flow, the counter valve (9) being arranged to prevent the flow of the lubricant out of the intermediate tank (1) into the inlet channel means (2)."

VI. The appellant has argued substantially as follows in the written procedure:

The person skilled in the art understands that the term "circulation lubrication system" refers to a system comprising a pressure pipeline configured to provide lubricant to at least one part to be lubricated and a return pipe line configured to return lubricant from at least one part to be lubricated. These are features of the prior art which would inevitably be present in a circulation lubrication system. This is demonstrated by document D2 (referring in particular to paragraph [0015]) which shows a known circulation lubrication system in which a pressure pipeline provides lubricant to a part to be lubricated and a return pipe line (5) returns lubricant from the part to be lubricated. Similarly, document D3 describes a traditional system for lubricating paper machines corresponding to that shown in Figure 1 of document D2.

The person skilled in the art is aware of the fact that a circulation lubrication system is a closed system. Thus, paragraph [0007] of document D2 states that a function of the oil tank is to remove impurities from the oil, such as air bubbles. The person skilled in that art would thus not consider using an open system in which the oil may become contaminated.

The system shown in document D1 is not a circulation lubrication system. It is merely a drip pan which is placed below a leaking device or machine part.

The claims of the main request thus comply with the requirements of Article 123(2) EPC.

In claim 1 of the auxiliary request, the references to pressure pipelines and return pipe lines have been

deleted. Claim 1 is nevertheless distinguished over the disclosure of document D1, since the system of document D1 cannot be considered to be a circulation lubrication system.

The invention as claimed in the claims of the auxiliary request is also new and inventive in view of the cited prior art.

## **Reasons for the Decision**

### **1. *Main Request***

The application as filed describes an arrangement in connection with a circulation lubrication system, which comprises an intermediate tank and inlet and outlet channel means connected to the tank. There is no disclosure relating to the source of lubricant supplied to the inlet channel means or the destination of lubricant which leaves the tank through the outlet channel means. There is also no indication of the form of the connection of the arrangement with a circulation lubrication system, in particular of the purpose and the role of the arrangement within the system.

Claim 1 has been amended so as to relate to a circulation lubrication system, including a pressure pipeline configured to provide lubricant to at least one part to be lubricated and a return pipe line configured to return lubricant from at least one part to be lubricated. It is specified in the amended claim that the inlet channel means is connected to the return

pipe line, and the outlet channel means is connected to the pressure pipe line.

Documents D2 and D3 show circulation lubrication systems in which a pressure pipeline provides lubricant to a part to be lubricated and a return pipe line returns lubricant from the part to be lubricated. However, document D1 also discloses a system in which lubricant being returned from the part to be lubricated drops directly into an open top 12 of a tank 10 (see Figures 1 and 2 and column 2, lines 24 to 28). There is thus no return pipe line. This system must be regarded as a circulation lubrication system, since lubricant collected in tank 10 is returned to a pressure vessel 20 through a conduit 18. From the pressure vessel 20, lubricant is forced under air pressure through a conduit 26, which may extend back to the equipment with the lubricant being directly reused (column 2, lines 61 to 68). The lubricant is thus circulated.

Accordingly, the presence of a return pipe line which returns lubricant from the part to be lubricated is not inevitably present in a circulation lubrication system. There is thus no unambiguous disclosure of this feature in the application as originally filed, and the amendment to claim 1 filed on 19 December 2006 does not comply with the requirements of Article 123(2) EPC.

2. *Auxiliary Request*

As stated under point 1 above, the system disclosed in document D1 is a circulation lubrication system. The system (cf. in particular Figures 1 and 2 and column 2, line 19 to column 3, line 13) comprises an intermediate



tank (20), inlet channel means (18) for feeding a lubricant into the intermediate tank (20) and outlet channel means (22) for removing the lubricant from the intermediate tank (20). Discharge means for emptying the intermediate tank are provided which comprises a pneumatic valve (30) controlled by a liquid level sensing device (44) arranged to start the discharge means by allowing air flow into the tank when the level of the lubricant in the intermediate tank (20) rises to a predetermined upper limit, and to stop the discharge means when the level of the lubricant in the intermediate tank (1) falls to a predetermined lower limit. A counter valve (19) is arranged in the inlet means (18) for the lubricant before the intermediate tank (20), seen from the direction of flow, the counter valve (19) being arranged to prevent the flow of the lubricant out of the intermediate tank (20) into the inlet channel means (18).

The subject-matter of claim 1 is thus not new.

**Order**

**For these reasons it is decided that:**

The appeal is dismissed.

The Registrar:

The Chairman:

D. Meyfarth

W. Zellhuber