PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

see form PCT/ISA/220

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY
(PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/EP2011/065072

International filing date (day/month/year)
01.09.2011

Priority date (day/month/year)
02.09.2010

International Patent Classification (IPC) or both national classification and IPC
INIV: B29C33/32 B29C45/26 B29C45/14 B25J15/04 B25J17/02

Applicant
SUPERFOS A/S

1. This opinion contains indications relating to the following items:

☒ Box No. I Basis of the opinion
☐ Box No. II Priority
☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
☐ Box No. IV Lack of unity of invention
☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step and industrial applicability; citations and explanations supporting such statement
☐ Box No. VI Certain documents cited
☐ Box No. VII Certain defects in the international application
☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA220.

3. For further details, see notes to Form PCT/ISA220.

Name and mailing address of the ISA:

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Date of completion of this opinion
see form PCT/ISA210

Authorized Officer

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Form PCT/ISA237 (Cover Sheet) (July 2009)
Box No. I  Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of:
   - ☑ the international application in the language in which it was filed
   - ☐ a translation of the international application into , which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1 (b)).

2. ☐ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43bis.1(a))

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:
   a. (means)
      - ☐ on paper
      - ☐ in electronic form
   b. (time)
      - ☐ in the international application as filed
      - ☐ together with the international application in electronic form
      - ☐ subsequently to this Authority for the purposes of search

4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5. Additional comments:

Box No. V  Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

   Novelty (N)  Yes: Claims 1-11
   No: Claims

   Inventive step (IS)  Yes: Claims 1-11
   No: Claims

   Industrial applicability (IA)  Yes: Claims 1-11
   No: Claims

2. Citations and explanations

   **see separate sheet**
Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1  State of the art:

Reference is made to the following documents


2  NOVELTY AND INVENTIVENESS

The present application does not meet the requirements of Article 33 PCT because the subject-matter of claims 1 to is not new within the meaning of Article 33(2) PCT nor inventive according to Article 33(3) PCT.

2.1  Independent claim 1

D1 discloses in figs 2, 6 and 7 (the references in parentheses applying to this document) an injection moulding apparatus (100) including a first female mould part (104,105) and a second male mould part (102,103,106),

- the second mould part being movable into the first mould part from a spaced apart position,

- a movable frame (40,202,301,400,500) with a device (6,303,306) for transferring an item or insert (5), such as a label (1), to the first mould part by a forward movement of the device (see arrows) towards the first mould part when the first mould part and the second mould part are in a spaced apart position, for subsequent moulding of a product carrying the item,
- the device being fixed to the frame by magnetic attraction, (see page 7, line 2).

and allowing a movement with respect to the frame (40, 202,400,500) of the device (303,306) fixed by magnetic attraction,

and including alignment faces (the circumference sides of parts 5,6,303,306) suitable for bringing said device (6,303,306) into alignment with said female mould part (5,104,105) during said forward movement, said alignment faces (the circumference sides of parts 5,6,303,306) contacting and moving against each other to provide said movement if said device and said first mould part are not aligned, see figures 6 to 8.

All the above mentioned features are discloses in the state of the art and thus known to the person skilled in the art. Hence the present application does not meet the requirements of Article 33 PCT, because the subject-matter of claim 1 is not new in the sense of Article 33(2) PCT.

Furthermore D2, as well as D3, disclose a handling system for in-mould transfer of labels.

D4, as well as D5, disclose the magnetic attraction between the handling arm (of the transfer unit) and the holding element on its tip, see passages indicated in search report.

D4 disclose in fig. 11, parts 82, 83 and in column 10, line 11 to 22 the feature of alignment faces suitable for bringing the device into alignment with the female mould part during the forward movement, and contacting and moving against each other to provide said movement if the device and the first mould part are not aligned, see figures 6 to 8.

To combine the teaching of D4 (or D5) with D2 (or D3) is obvious and thus does not require an inventive step for the skilled person. Therefore the present application does not meet the requirements of Article 33 PCT, because the subject-matter of claim 1 is not inventive according to Article 33(3) PCT.

2.2 The dependent claims 2 to 10

The different features of the dependent claims 2 to 10 of independent claim 1 are state of the art and obvious to the person skilled in the art, i.e. the features are known per se from D1.
Furthermore the essential features of the depending claims are disclosed in D2 to D5. The combination of D2 (or D3) with D4 (or D5) is considered to be obvious for the skilled person. The individual reasoning is for

2.2.1 claim 2

D1 discloses in figs. 2, 6 and 7 that the device (303) and the second mould part (105) including substantially conical/frusto-conical alignment faces.

D2 disclose this feature in fig. 4, parts 46, 14' and in column 5, line 56.
D3 disclose this feature in figs. 1, 6 and 7; parts L,6a and in column 3, line 59.

2.2.2 claim 3

D1 discloses in figs. 2, 6 and 7 that an alignment faces being slanted with respect to the direction of said forward movement.

D2 disclose this feature in fig. 4, parts 46, 14' and in column 5, line 56.
D3 disclose this feature in figs. 1, 6 and 7; parts L,6a and in column 3, line 59.

2.2.3 claim 4

D1 discloses in fig. 1 a device (303) being adapted to receive by winding a label (1) and being movable between a position for winding of said label around said device and a position at least partially received within said first mould part (104, 105).

D3 disclose this feature in fig. 4; parts 11 and 21; and in column 5, line 55.

2.2.4 claim 5

D1 discloses in figs. 2, 6 and 7 a frame (302, 400) including a fixture (401) for fixing said device (303) to said frame (5), said device or said fixture including a magnet (page 7, line 2), preferably an electromagnet, and the other one of said device or said fixture having an affinity for magnetic attraction.

D4 disclose this feature as well in figs. 3, 11, component 30 and in column 6, line 45.

2.2.5 claim 6

D1 discloses in figs. 2, 6 and 7 a device (303) including a backing plate (301, 400, 500) including said magnet (307, 401), (page 7, line 2).
D4 disclose this feature as well in figs. 3, 11, component 30 and in column 6, line 45.

2.2.6 claim 7
D1 discloses in figs. 2, 6 and 7 a surface of said fixture (301) being complementary with a rear surface of said device (303).

2.2.7 claim 8
D1 discloses in figs. 2, 6 and 7 a surfaces (301,202,404) being flat and extending perpendicular to the direction of said forward movement.

2.2.8 claim 9
D1 discloses in fig. 3 a first mould part (104,105) including an injection opening for injecting a plastics material

2.2.9 claim 10
D1 discloses on page 6, paragraph3, a device (303) including means (electrostatic charge) for temporary holding said item to a surface of said device
D2 and D3 disclose such means as conduits establishing a vacuum.

2.3 Independent claim 11
D1 discloses (the references in parentheses applying to this document) an implement for placing an item, such as a label (1), onto or within a mould part, female (104,105) or male (102,103,106), of an injection moulding apparatus,
- the implement including a movable frame (40,202,300,400,500) with a device (6,303,306) for releasably holding said item,
- the device being movable by said frame towards the mould part (102,104) and being adapted to then release said item,
- the device (6,303,306) being fixed to said frame (40,202,301,400,500) by magnetic attraction, (page 7, line 2)
- and allowing a movement with respect to the frame (40, 202,400,500) of the device (303,306) fixed by magnetic attraction,
- and including alignment faces (the circumference sides of parts 5,6,303,306) suitable for bringing said device (6,303,306) into alignment with said female mould part (5,104,105) during said forward movement, said alignment faces (the circumference sides of parts 5,6,303,306) contacting and moving against each other to provide said movement if said device and said first mould part are not aligned, see figures 6 to 8.

All the above mentioned features are discloses in the state of the art and thus known to the person skilled in the art. Hence the present application does not meet the requirements of Article 33 PCT, because the subject-matter of claim 1 is not new in the sense of Article 33(2) PCT.

Furthermore D2, as well as D3, disclose a handling system for in-mould transfer of labels.

D4, as well as D5, disclose the magnetic attraction between the handling arm (of the transfer unit) and the holding element on its tip, see passages indicated in search report.

D4 disclose in fig. 11, parts 82, 83 and in column 10, line 11 to 22 the feature of alignment faces suitable for bringing the device into alignment with the female mould part during the forward movement, and contacting and moving against each other to provide said movement if the device and the first mould part are not aligned, see figures 6 to 8.

To combine the teaching of D4 (or D5) with D2 (or D3) is obvious and thus does not require an inventive step for the skilled person. Therefore the present application does not meet the requirements of Article 33 PCT, because the subject-matter of claim 11 is not inventive according to Article 33(3) PCT.

3 Industrial applicability

No objections are raised against the industrial applicability of the present application, Article 33(4) PCT.