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Datasheet for the decision of 1 March 2022

Case Number: T 1024/18 - 3.2.06

12183745.4 Application Number:

Publication Number: 2609899

IPC: A61F13/15

Language of the proceedings: ΕN

Title of invention:

Apparatus and method for forming absorbent cores

Patent Proprietor:

Curt G. Joa, Inc.

Opponent:

GDM S.p.A.

Headword:

Relevant legal provisions:

EPC Art. 54, 123(2), 84

Keyword:

Novelty - public prior use - obligation to maintain secrecy (no)

Amendments - auxiliary requests 1 and 3 - added subject-matter (yes)

Claims - support in the description (no)

Decisions cited:

T 1989/18, T 1808/06, T 0977/94, T 0300/04, G 0010/91

Catchword:

Necessity to adapt the description (Reasons 3)



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Case Number: T 1024/18 - 3.2.06

DECISION
of Technical Board of Appeal 3.2.06
of 1 March 2022

Appellant: GDM S.p.A.

(Opponent) Via Battindarno, 91 40133 Bologna (IT)

Representative: Puggioli, Tommaso

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Respondent: Curt G. Joa, Inc.

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Decision under appeal: Decision of the Opposition Division of the

European Patent Office posted on 14 February 2018 rejecting the opposition filed against European patent No. 2609899 pursuant to Article

101(2) EPC.

Composition of the Board:

W. UnglerT. RosenblattC. Almberg

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Summary of Facts and Submissions

- I. An appeal was filed by the appellant (opponent) against the decision of the opposition division rejecting the opposition to European patent No. 2 609 899. It requested that the decision under appeal be set aside and the patent be revoked.
- II. In its reply to the grounds of appeal, the respondent (patent proprietor) requested that the appeal be dismissed (main request) or, in the alternative, that the patent be maintained according to one of auxiliary requests 1 to 3.
- III. The following documents and evidence are relevant to the present decision:
 - E3 Invoice no. 648/V1, of 30 July 2009
 E4 Excerpts from the Operating and maintenance
 manual of 'AT 450 Neos 3 Flex Adult' diaper machine
 E10 Email exchange between the representatives of the
 appellant and respondent of 31 October 2017.
 Witness statements of Mr Claessens and Mr Berg as
 recorded during the opposition proceedings (see annexes
 to the minutes, pages 1/40 to 40/40 and pages 1/8 to
 8/8)
- IV. The Board issued a summons to oral proceedings and a subsequent communication containing its provisional opinion, in which it indicated *inter alia* that the sale of the Neos machines by GDM S.p.A. (hereafter "GDM") to SCA Hygiene Products Gennep B.V. (hereafter "SCA") appeared to render these available to the public such that the alleged prior use Neos 3 was prejudicial to the novelty of the subject-matter of claim 1 of the

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main request. It further indicated that the subjectmatter of claim 1 of auxiliary requests 1 and 3 appeared to extend beyond the content of the application as filed, but that the subject-matter of claim 1 of auxiliary request 2 seemingly involved an inventive step.

- V. With letter of 11 November 2021 the respondent indicated that it would not attend the scheduled oral proceedings.
- VI. In a further communication of 25 November 2021 the Board indicated that a description adapted to the claims of auxiliary request 2 had not been filed and that the respondent may wish to consider the advisability of filing such a description.
- VII. Oral proceedings by videoconference were held before the Board on 1 March 2022 in the absence of the respondent.
- VIII. The parties' final requests by the end of the oral proceedings were unchanged from those indicated in points I. and II. above.
- IX. Claim 1 of the main request reads as follows:

"A method of forming an absorbent core comprising: at a first core-forming drum (10, 12B), forming a first core (26B) having a superabsorbent polymer and fluff mixture layer;

at a first debulking unit (20), debulking said first core;

at a second core-forming drum (10, 12S), forming a second core (26S) having a second super absorbent polymer and fluff mixture layer;

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at a second debulking unit (20), debulking said second core;

after debulking said first core, conveying at a first speed said first core towards said second core-forming drum;

after debulking said second core, receiving said second core at a second speed at a core acceleration unit (22), said second speed being less than said first speed;

with said acceleration unit, accelerating the second, smaller core from the second speed to substantially match the first speed; and depositing said second core from said core acceleration unit onto said first core."

Claim 1 of each of auxiliary requests 1 to 3 respectively is appended to this decision.

X. The appellant's arguments relevant to the present decision may be summarised as follows:

Main request

The subject-matter of claim 1 lacked novelty over the Neos 3 prior use. There was no obligation on SCA to maintain secrecy regarding the Neos 3 production line sold to it by GDM. This was independently confirmed by the witnesses Mr Claessens and Mr Berg heard before the opposition division. The sale of the Neos 3 production line as evidenced by E3 thus confirmed its public availability. All features of claim 1 were also disclosed by each of the Neos production lines (Neos, Neos 2 and Neos 3) as pages 22/40 to 23/40 of Mr Claessens's witness statement showed. The essential process and the technical features of each of these three production lines were thus in principle the same.

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Therefore, the opposition division's doubts relating to improvements and adaptations of the Neos 3 production line did not relate to these 'same' features of Neos 3 which anticipated the claimed subject-matter.

Auxiliary request 2

The sole description on file was not consistent with the claims of auxiliary request 2. Claim 1 defined a non-woven web atop which a first continuous core was formed and a further non-woven web atop which a second continuous core was formed. In contrast to this, the first embodiment of the invention, disclosed in paragraphs [0047] to [0051] of the description, did not form the first or second continuous core atop a respective non-woven web, but rather formed these on a 'screen' (see col. 9, line 37). At least this inconsistency between the claims and description resulted in auxiliary request 2 failing to meet the requirements of Article 84 EPC.

XI. The respondent's arguments may be summarised as follows:

Main request

Even if sufficiently substantiated, the public availability of the Neos 3 prior use was not proven beyond reasonable doubt, which was the appropriate standard to apply. The commercial and technical relationship between GDM and SCA was strongly suggestive that at least a tacit obligation of secrecy existed. This view was supported by: visitors to the SCA facility signing confidentiality agreements (see Mr Claessens's witness statement, page 7/40, lines 6 to 10); SCA not communicating information regarding the

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Neos machines to others (see pages 9/40 and 37/40); the Neos machines being housed in a separate facility to SCA's other production lines (see page 39/40); and the operating and maintenance manual E4 containing confidential know-how (see E10). The commercial and technical relationship that existed between GDM and SCA was strongly suggestive of the existence of a tacit obligation to keep the information relating to the Neos 3 production line secret. Any co-development of the Neos 3 production line also suggested a desire to keep this confidential.

Auxiliary request 1

All features introduced into claim 1 were explicitly disclosed at page 17, lines 7 to 14 of the application as filed. The subject-matter of claim 1 thus met the requirement of Article 123(2) EPC.

Auxiliary request 3

The amendments to claim 1 of this request overcame the objections raised to the corresponding request before the opposition division.

Reasons for the Decision

Main request

1. Novelty

The subject-matter of claim 1 lacks novelty over the prior use "AT 450 Neos 3 Flex Adult" diaper production line (hereafter, simply "Neos 3").

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- 1.1 In its decision, the opposition division found that the prior use was sufficiently substantiated at least by the Neos 3 diaper production line. The technical features of the production line were disclosed in E4 and evidence of the sale to SCA in 2009 was proven by invoice E3. It however found that:
 - (a) The alleged prior use was not made publicly available by the sale to SCA; and
 - (b) The prior use lacked relevance in that it did not disclose all features of claim 1.
- 1.2 Public availability
- 1.2.1 According to established case law, the sale of an apparatus is, in the absence of any special circumstances limiting the freedom to divulge details thereof, sufficient to render the technical details of the apparatus available to the public. The sale by GDM of the Neos 3 production line to SCA in 2009, as evidenced by E3, has not been questioned. However, the Board finds, contrary to the opposition division, that there is no evidence of confidentiality, not even tacitly so, which restricted SCA from freely divulging details of the production line to any third party.
- 1.2.2 The Board concurs with the respondent and the opposition division that the 'beyond reasonable doubt' standard of proof is appropriate for the prior use to be seen as proven. The respondent's arguments relating to various statements of the witnesses to show that doubt exists to the public availability of the Neos 3 production line are however not persuasive.
 - (a) In regard to signing confidentiality agreements, on page 7/40, lines 6 to 10 of Mr Claessens's

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testimony, the witness states, 'I know that some [visitors] have to do, I know that some are not requested to'. This does not allow any conclusion that a blanket condition of confidentiality applied to visitors to the Neos 3 production line. Quite the contrary, it shows that SCA had the freedom to disclose the Neos 3 production line to whom it wished.

- (b) As regards SCA allegedly not communicating information regarding the Neos 3 production line to others, this cannot be concluded from the witness statements. On page 9/40, 2nd last paragraph, of his testimony, Mr Claessens states 'we do not kind of openly communicate issues of GDM to others, but it's not a secrecy agreement'. This further enforces that no confidentiality agreement was in place restricting SCA from divulging details of the Neos 3 production line to a third party.
- (c) Mr Claessens's statement on page 37/40, 4th paragraph, that the operating and maintenance manual (E4) would not be shown to competitors, would however not have restricted a third party, on visiting the production line, from understanding its operation and the process steps employed in forming the absorbent core. Indeed, from a real life perspective it would be entirely normal and indeed expected not to show such a manual to the vast majority of visitors.
- (d) That the Neos 3 machine was housed in a separate facility to the other production lines at SCA and visitors could take pictures only of their own equipment (see page 39/40) fails to prove that third parties had no access to the Neos 3

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production line. Taking a photo is not a prerequisite for a production line to be considered available to the public.

- (e) The respondent's reference to E10 with the argument that the operating and maintenance manual E4 contained confidential know-how and that the production line was thus to be seen as confidential, is not accepted. Even if it were accepted that the 'Client's know-how' referred to in E10 was actually 'confidential know-how', this fails to cast doubt on the public availability of the Neos 3 production line for which no evidence of the existence of a secrecy agreement has been provided. Indeed the statements from the witnesses confirm the precise opposite.
- 1.2.3 The respondent's argument that a tacit obligation not to divulge details of Neos 3 must have existed due to the commercial and technical relationship that existed between GDM and SCA is held to be mere conjecture lacking foundation. According to the witness Mr Berg, indicated as commercially responsible for the acquisitions of Neos 2 and Neos 3 and for preparing, negotiating and signing the purchase contracts on SCA's behalf, there was no joint development project between GDM and SCA (see Mr Berg's testimony, questions and answers bridging pages 3-4/8 and 5-6/8, respectively). Irrespective of this, any possible existence of a commercial and technical relationship existing between GDM and SCA before the sale of the machines also does not allow a conclusion that a tacit obligation of confidentiality existed once the machines were sold to SCA and became its sole property. In fact, the sole secrecy agreements referred to by the witnesses (see Mr Berg's statement, page 4/8, line 6 onwards and page

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7/8, last paragraph) relate to GDM being prohibited from divulging any detail of the SCA production facilities, rather than any restrictions being placed on SCA relating to the purchase of the Neos 3 production line. It is noteworthy that, despite a secrecy agreement restricting GDM from divulging details of the SCA facilities, no agreement is referred to by the witnesses, let alone has been filed, obliging SCA to similar secrecy with respect to the purchased Neos 3 production line. The lack of an agreement limiting SCA from divulging detail of Neos 3 is thus found by the Board to be proven beyond all reasonable doubt.

1.2.4 As regards the respondent's specific argument that any co-development of the Neos 3 production line would suggest a desire to keep it confidential, this is also not accepted. Page 24/40, first paragraph of Mr Claessens's testimony states that, in principle, the basic process carried out in the Neos, Neos 2 and Neos 3 production lines was the same, any such [codeveloped] modifications relating to e.g. easier maintenance. In this regard it is firstly noted that Neos and Neos 2 relate to production lines sold by GDM to SCA in 2001 and 2004 respectively and, as such, are predecessors to the Neos 3 production line. It is further noted that, in the entirety of its submissions in the appeal proceedings, the respondent has not countered the appellant's argument that the Neos, Neos 2 and Neos 3 production lines each disclosed all the technical features of claim 1. Thus, even if, despite Mr Berg's testimony (see point 1.2.3 above), joint, cooperative modifications and developments took place on the Neos 3 production line, any such modifications and developments would not have been to the fundamental method of manufacturing the absorbent cores which

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remained constant between the three production lines, this notably not having been disputed by the respondent. Consequently, the modifications and developments would not, even if they were co-developed under secrecy, for which there is anyway no evidence or suggestion, restrict the basic process of the production line from being available to the public merely by way of the unfettered sale of the Neos 3 production line to SCA.

- 1.2.5 In conclusion, the Board thus finds it to be proven beyond reasonable doubt that the sale of the Neos 3 production line occurred without any obligation to confidentiality. Consequently, the sale of the Neos 3 production line, as evidenced by E3, is seen to have rendered the (relevant) technical details of the Neos 3 production line available to the public.
- 1.3 Technical features of Neos 3
- 1.3.1 In point 2.4.3.5 of the opposition division's decision, the conclusion was reached that a gap existed in the precise technical features of the diaper production lines due to one of the witnesses being unable to confirm whether the operating and maintenance manual (E4) included improvements and adaptations made to the machines.
- 1.3.2 In reaching that conclusion, the opposition division referred to page 22/40 of Mr Claessens's statement. It however failed to properly reflect further questioning on this subject by the opposition division itself on page 23/40 as to whether the adaptations and improvements related to the basic features of the machines in the Neos, Neos 2 and Neos 3 production lines. To this the witness replied (see page 24/40)

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that "[the basic machines] were the same. I can well imagine that we did small improvements to have a problem solved or easier maintenance or things like that. But in principle the process was the same."

- 1.3.3 From this it is clear that the fundamental operation of all three of the alleged prior used production lines, as detailed with respect to Neos 3 in E4, was the same (this also not being disputed by the respondent, see point 1.2.4 above), the sole differences, if any, in Neos 3 amounting to improvements and adaptations, for example, to enable easier maintenance. This is further supported on page 9/40 of Mr Claessens's testimony which states, 'a big portion of the machine is common supply' which in the context of the witness questioning implies that the production line is not specific to SCA requirements and any improvements and adaptations would not affect the fundamental steps used to manufacture the core in the Neos 3 production line. Consequently, it is inconceivable that any improvements and adaptations would have altered the fundamental operation of the core elements of the production line.
- 1.3.4 Lastly, in its reply to the appellant's statement of grounds of appeal, the respondent did not contest that any features of claim 1 were not disclosed by the Neos 3 production line.
- 1.3.5 From all the above points, the Board concludes that the prior use Neos 3 discloses all features of claim 1.
- 1.4 In summary, therefore, the Board finds it to be proven beyond all reasonable doubt that Neos 3 was sold and used without any confidentiality while disclosing all features of claim 1. Consequently the subject-matter of claim 1 lacks novelty (Article 54 EPC) over the prior

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use Neos 3. The main request is thus not allowable.

- 2. Auxiliary request 1
- 2.1 Article 123(2) EPC

The subject-matter of claim 1 fails to meet the requirement of Article 123(2) EPC.

- 2.1.1 The Board in its preliminary opinion (see item 3.1.1) indicated that the subject-matter of claim 1 appeared to extend beyond the content of the application as filed, contrary to Article 123(2) EPC. This was due to the features of the embodiment on page 17, lines 7 to 14 as filed, provided by the respondent as the basis for the amended claim, disclosing the manufacture of a continuous large and small core which was subsequently cut into discrete core forming units, not having been included in claim 1. This resulted in an unallowable intermediate generalisation of the content of the application as originally filed.
- 2.1.2 To this preliminary opinion, the respondent provided no counter-arguments.
- 2.1.3 The Board thus confirms its preliminary opinion herewith; the subject-matter of claim 1 extends beyond the content of the application as filed, contrary to the requirement of Article 123(2) EPC. Auxiliary request 1 is thus not allowable.
- 3. Auxiliary request 2
- 3.1 Article 84 EPC

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- 3.1.1 One of the requirements of Article 84 EPC is that the "claims ... shall be ... supported by the description". According to long established case law of the Boards of Appeal, this has been interpreted as requiring the entirety of the description to be consistent with any claims found to meet the requirements of the EPC. In this context see, for example: T0977/94, Reasons 6.1; T 0300/04, Reasons 5; T 1808/06, Reasons 2, first paragraph.
- 3.1.2 That this is the established case law of the Boards can also be gleaned from the Rules of Procedure of the Boards of Appeal (RPBA 2020) where, with regard to Article 11 thereof, the explanatory remarks (see the second paragraph thereof) deal with the case where remittal to the department of first instance is still provided for the purpose of adaptation of the description.
- 3.1.3 In its preliminary opinion (see item 3.2), the Board indicated that the subject-matter of claim 1 of auxiliary request 2 appeared to involve an inventive step. The respondent subsequently stated that it would not attend the scheduled oral proceedings. In view of this, the Board indicated in its further communication of 25 November 2021 that a description adapted to the claims of auxiliary request 2 had not been filed and that the respondent may wish to consider the advisability of filing such a description. No adapted description was filed by the respondent in reply to that communication.
- 3.1.4 In view of the facts of the present case, not least that the respondent was explicitly given the opportunity to file an adapted description, the Board, having regard to the principle of procedural economy,

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did not find it appropriate to remit the case to the opposition division for the purpose of adaptation of the description (Article 111 EPC).

- 3.1.5 The Board concurs with the appellant's contention presented at oral proceedings that the sole description on file was not consistent with the claims of auxiliary request 2. As indicated by the appellant, claim 1 of auxiliary request 2 defined a non-woven web atop which a first continuous core was formed and a further nonwoven web atop which a second continuous core was formed. In contrast to this, the first embodiment of the invention disclosed in paragraphs [0047] to [0051] of the description did not form the first or second continuous core atop a respective non-woven web, rather formed these on a 'screen' (see col. 9, line 37). Consequently at least this portion of the description is inconsistent with the claims of auxiliary request 2 i.e. the claims are not supported by the description as required by Article 84 EPC.
- 3.1.6 In the recent decision T 1989/18 (see particularly Reasons 5) addressing a similar issue to the present case of support of the claims by the description, the Board in that case found that inconsistencies in the description could not affect clarity of the claims since, according to Article 84 EPC, these in themselves had to be clear.
- 3.1.7 The present Board concurs that according to Article 84
 EPC, claims must be clear in themselves. However, it is important to note that Article 84 EPC is not entitled "clarity of the claims", on which the Board in case T 1989/18 however put its emphasis, but simply "claims". Thus the provision relates to claims in general and actually covers three distinct requirements

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on claims, namely their clarity, their conciseness and their support by the description. According to the present Board, the criterion that the claims be "supported by the description" is not in any way subordinate to the requirement of "clarity" of the claims, but is a requirement of its own (as is conciseness of the claims).

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- 3.1.8 Merely providing a part of the description which gives support to the claims appears to be at odds with the wording "supported by the description". Only providing such a part would be rather more akin to the claims having some form of basis in the description or being supported by "part" of the description, whereas the wording of Article 84 EPC requires support by "the description". To put this into context, to provide only support for the claims in one single passage of the description while the rest of the description might give a different or even contradictory meaning to the claims, would in essence negate the general meaning of the words "support by the description" and in fact would allow it to be reduced to a de minimis requirement of e.g. repetition of the claim wording while allowing the entire remaining description to be left to explain an entirely different invention to the one claimed.
- 3.1.9 Hence, the Board finds that the requirement in Article 84 EPC of the claims to be supported by the description includes the requirement that the description is consistent with the claims not only in some part but throughout. Considering also Article 84 EPC in the wider context of the EPC, this understanding of the provision seems to be in line with the standard of claim interpretation for national proceedings enshrined in Article 69(1) EPC, according to which the

description is also to be taken into account when interpreting the claims. Inconsistencies between the claims and the description could thus - in particular in national proceedings - be the source of diverging interpretations as regards the scope of the claims. Accordingly, misinterpretation could be avoided in particular if inconsistent information contained in the description or drawings is already removed in the proceedings before the EPO. The importance of Article 84 EPC for the interpretation of claims in national proceedings is also documented in the "travaux préparatoires" of the EPC 1973. It emerges from the preparatory documents that a provision corresponding to the current Article 84 EPC, which was originally part of the Implementing Rules, was re-located to the Convention due to its importance for national infringement proceedings (cf. BR/51/70, point 18). Thus, the support requirement of Article 84 EPC also serves the aim to ensure legal certainty for national post-grant proceedings (as do the requirements of clarity and conciseness).

3.1.10 Thus, when amendments are made to the claims (amendment to the granted claims in the present case), the description must be made consistent therewith in the sense that a reader is not presented with any information conflicting with the wording of the claims. Embodiments of the invention which are not consistent with the claims must therefore be deleted or must be clearly identifiable to the reader, for example by rewording of relevant passages to indicate that such passages are not, or are no longer, part of the invention. All of the latter adaptations are indeed common practice when making claim amendments.

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- 3.1.11 When such issues can be addressed it therefore makes sense, even if only from a practical point of view, that such issues be addressed. Indeed, G 10/91 (see Reasons 19) requires that any amendments to a patent are compatible with the requirements of the EPC and does not simply look at the claims being allowable.
- 3.1.12 The Board thus finds that, at least due to the identified inconsistency between the claims and the description, the claims are not supported by the description. Consequently the requirement of Article 84 EPC that the claims be supported by the description is not met. Auxiliary request 2 is therefore not allowable.
- 4. Auxiliary request 3
- 4.1 Article 123(2) EPC

The subject-matter of claim 1 fails to meet the requirement of Article 123(2) EPC.

- 4.1.1 The Board in its preliminary opinion indicated that the subject-matter of claim 1 of auxiliary request 3 appeared to extend beyond the content of the application as filed, contrary to Article 123(2) EPC. This was due to the omission of the continuous cores and related anvil/knife units from claim 1.
- 4.1.2 To this preliminary opinion the respondent provided no counter-arguments.
- 4.2 In the absence of any reason to alter its preliminary opinion, the Board hereby confirms it. The subject-matter of claim 1 extends beyond the content of the application as filed, contrary to the requirement of

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Article 123(2) EPC. Auxiliary request 3 is thus not allowable.

Order

For these reasons it is decided that:

- 1. The decision under appeal is set aside.
- 2. The patent is revoked.

The Registrar:

The Chairman:



D. Grundner M. Harrison

Decision electronically authenticated

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European application no. 12183745.4 - First Auxiliary Request

Claims:

1. A method of forming an absorbent core comprising:

at a first core-forming drum (10, 12B), forming a first core (26B) having a first fluff layer and a first super absorbent polymer and fluff mixture layer by introducing a non-woven web (50) to the first core-forming drum, applying the first fluff layer atop the non-woven web using fluff introduction unit (18) and next applying the first super absorbent polymer and fluff mixture layer using super absorbent polymer/fluff mixture introduction unit (40);

at a first debulking unit (20), debulking said first core;

at a second core-forming drum (10, 12S), forming a second core (26S) having a second fluff layer and a second super absorbent polymer and fluff mixture layer by introducing a non-woven web (50) to the second core-forming drum, applying the second fluff layer atop the non-woven web using fluff introduction unit (18) and next applying the second super absorbent polymer and fluff mixture layer using super absorbent polymer/fluff mixture introduction unit (40);

at a second debulking unit (20), debulking said second core;

after debulking said first core, conveying at a first speed said first core towards said second core-forming drum;

after debulking said second core, receiving said second core at a second speed at a core acceleration unit (22), said second speed being less than said first speed; with said acceleration unit, accelerating the second, smaller core from the second speed to substantially match the first speed; and

depositing said second core from said core acceleration unit onto said first core.

European application no. 12183745.4 - Second Auxiliary Request

Claims:

A method of forming an absorbent core comprising:

at a first core-forming drum (10, 12B) having a continuous pocket, forming a first continuous core (26B) having a first fluff layer and a first super absorbent polymer and fluff mixture layer by introducing a non-woven web (50) to the first core-forming drum, applying the first fluff layer atop the non-woven web using fluff introduction unit (18) and next applying the first super absorbent polymer and fluff mixture layer using super absorbent polymer/fluff mixture introduction unit (40);

at a first debulking unit (20), debulking said first continuous core;

at a second core-forming drum (10, 12S) having a continuous pocket, forming a second continuous core (26S) having a second fluff layer and a second super absorbent polymer and fluff mixture layer by introducing a non-woven web (50) to the second coreforming drum, applying the second fluff layer atop the non-woven web using fluff introduction unit (18) and next applying the second super absorbent polymer and fluff mixture layer using super absorbent polymer/fluff mixture introduction unit (40);

at a second debulking unit (20), debulking said second continuous core;

after debulking said first continuous core, conveying at a first speed said first core towards said second core-forming drum;

after debulking said second continuous core, cutting it using a first anvil/knife unit (42) and receiving the severed second core pieces at a second speed at a core acceleration unit (22, 44), said second speed being less than said first speed;

with said acceleration unit, accelerating the second, smaller core pieces from the second speed to substantially match the first speed;

depositing said second core from said core acceleration unit onto said first continuous core; and

cutting the first continuous core using a second anvil/knife unit (42).

European application no. 12183745.4 - Third Auxiliary Request

Claims:

A method of forming an absorbent core comprising:

at a first core-forming drum (10, 12B), forming a first core (26B) having a first fluff layer and a first super absorbent polymer and fluff mixture layer by introducing a non-woven web (50) to the first core-forming drum, applying the first fluff layer atop the non-woven web using fluff introduction unit (18) and next applying the first super absorbent polymer and fluff mixture layer using super absorbent polymer/fluff mixture introduction unit (40);

at a first scarfing unit (14), scarfing said first core;

at a first debulking unit (20), debulking said first core;

at a second core-forming drum (10, 12S), forming a second core (26S) having a second fluff layer and a second super absorbent polymer and fluff mixture layer by introducing a non-woven web (50) to the second core-forming drum, applying the second fluff layer atop the non-woven web using fluff introduction unit (18) and next applying the second super absorbent polymer and fluff mixture layer using super absorbent polymer/fluff mixture introduction unit (40);

at a second scarfing unit (14), scarfing said second core;

at a second debulking unit (20), debulking said second core;

after debulking said first core, conveying at a first speed said first core towards said second core-forming drum;

after debulking said second core, receiving said second core at a second speed at a core acceleration unit (22), said second speed being less than said first speed;

with said acceleration unit, accelerating the second, smaller core from the second speed to substantially match the first speed; and

depositing said second core from said core acceleration unit onto said first core.