

judgment

THE HAGUE DISTRICT COURT

Team commercial matters hearing location The Hague

case number / cause list number: C/09/483599 / HA ZA

Judgment dated 19 October 2016

in the matter of

the legal entity incorporated under foreign law
INNOVATIONS 4 FLOORING HOLDING N.V.,
with its registered office in Willemstad, Curacao,
claimant,
counsel: *meester* L.Ph.J. baron van Utenhove in The
Hague.

versus

the private company with limited liability
UNILIN BEHEER B.V.,
with its registered office in Oosterwijk,
defendant,
counsel: *meester* D. Knottenbelt practising in Rotterdam.

Parties will hereinafter be referred to as 14F and Unilin.

The substance of the case for 14F is handled by *meester* ir. M.W. de Koning and *meester* R.P. Soullié and for Unilin by *meester* P.A.M. Hendrick and *meester* W. de Jong. They are all lawyers in Amsterdam. 14F was furthermore assisted by the patent agents ir. B.W.H. Langenhuijsen and O.S. Roelands M.Sc. Unilin was furthermore assisted by the patent agent ir. B.Ch. Ledeboer.

1. The proceedings

- 1.1. The course of the proceedings is clear from:
 - the decision of the preliminary relief judge of this District Court dated 15 December 2014, whereby 14F was allowed to serve a summons in accelerated proceedings on

- the merits in patent cases;
- the writ of summons dated 22 December 2014;
- the document containing exhibits of 25 February 2015, with exhibits 1 through 44;
- Unilin failed to appear in the first instance and then still appointed counsel, after which the proceedings were removed from the accelerated regime in patent cases (VRO regime);
- Unilin's statement of defence dated 6 May 2015 with exhibits 1 through 5;
- - the document containing an increase of claim, also containing additional exhibits of 14F dated 2 November 2015, with exhibits 45 and 46;
- the document containing additional exhibits of 14F, dated 20 May 2016, submitted on 6 May 2016, with exhibits 47 through 61;
- the documents containing exhibit of Unilin dated 20 May 2016, submitted on 9 May 2016, with exhibits 6, with 4 auxiliary requests and with exhibits 7 through 12;
- the additional statement of the legal costs of 14F (exhibit 62) and of Unilin (exhibit 13) submitted on 19 May 2016;
- the oral argument held on 20 May 2016 and the accompanying written pleadings submitted by the parties, the paragraphs 2.4, 2.5, 8.6 through 8.13, 8.32 through 8.34, 8.36 through 8.38, 8.42 through 8.44 in the written pleadings of *meester* Hendrick and *meester* De Jong having been deleted, which paragraphs were not read aloud during the oral pleadings.

1.2. 14F objected to the auxiliary requests submitted by Unilin as exhibit 6, because these could have been submitted earlier and because these were not submitted to 14F until three days after the final date of submission of exhibits in conformity with paragraph 2.9 of the National Rules of Procedure for Civil Writ of Summons Cases before the Courts and until 14F requested them. After having heard both parties in this regard during the oral argument, the District Court rejected the objection. The District Court considered in that context that there is no evidence to suggest that 14F was prejudiced in its defence now that it received exhibit 6 from Unilin one working day after the deadline. For the record, this exhibit had already been submitted to the District Court on 4 April 2016 but a copy thereof was not simultaneously sent to 14F.

1.3. Unilin, for its part, raised objections against exhibits 54 through 58 of 14F. This concerns photographs of panels on which it cannot respond during the oral argument, according to Unilin, because it has not had the opportunity to inspect the panels in question. After having heard both parties in this regard during the oral argument, the District Court rejected the objection. The District Court considered in that context that the exhibits were submitted in a timely manner and that Unilin, if necessary, will be given the opportunity to respond after the oral argument if the exhibits are decisive for the decision in this case.

1.4. At the end of the oral argument, the case was referred to the cause list for judgment. Finally, judgment was scheduled for today.

2. The facts

Background

2.1. 14F is a company whose activities are focused on floor panels made of wood, laminate and vinyl. 14F holds European patent EP 2 440 724 BI (hereinafter: EP 724) for a *floor panel and floor covering consisting of a plurality of such floor panels*, granted to it on 14 May 2014. The 3L TripleLock technology described in EP 724 provides a solution for snapping together

the short sides of floor panels. In 2014, 14F furthermore applied for a patent for its Click4U-floor panels whereby the 3L TripleLock technology is used for connecting the short side of the panel in combination with another technology for connecting the long side.

2.2. The Unilin group markets laminate floors, among other things. Unilin also holds patents in the field of coupling floor panels without glue, among others, European patent EP 1 026 341 BI (hereinafter: EP 341 of the patent) for a *'floor covering, consisting of hard floor panels and method for manufacturing such floor panels.'*

2.3. On 28 July 2015, 14F sent floor panels provided with its developed Click4U technology to Unilin with the request to confirm that Unilin EP 341 will not enforce against such products. Unilin failed to provide a substantive response to that request.

2.4. To that effect, 14F instituted preliminary relief proceedings and demanded that Unilin be ordered to permit and tolerate reserved acts by 14F and its licensees of Click4U products pending the present proceedings on the merits, because it believes that EP 341 is invalid. The preliminary relief judge of this District Court declared by judgment dated 27 November 2015 that the court partially lacked jurisdiction to hear the claims and otherwise declared 14F's claims inadmissible.

2.5. By judgment dated 20 July 2016, this District Court rejected the revocation of the Dutch part of EP 724 claimed by Flooring Industries Limited S.a.r.l., which is part of the Unilin group.

EP 341

2.6. EP 341 was granted on 6 August 2003 at an international patent application on 7 June 1997, published as WO 97/47834 (hereinafter: the application) claiming priority of Belgian patent applications BE 9600527 of 11 June 1996 (hereinafter: BE 527) and BE 9700344 of 15 April 1997 (hereinafter: BE 344). The patent is applicable in, inter alia, the Netherlands. An opposition was filed against EP 341 by nine opposing parties. The opposition was withdrawn by seven opposing parties prior to the preliminary opinion of the Opposition Division, the last two withdrew their opposition shortly before the oral hearing. The Opposition Division of the European Patent Agency has decided that EP 341 can be maintained.

2.7. EP 341 has 26 claims. The claims read as follows in the original English text:

1. Hard floor panel, for realizing a floor covering, whereby this floor panel (1) at least at the edges of two opposite sides (2-3, 26-27) is provided with coupling parts (4-5, 28-29), which allow that two of such panels can co-operate with each other, whereby these coupling parts (4-5, 28-29) are substantially in the form of a tongue (9-31) and a groove (10-32) and whereby these coupling parts are provided with integrated mechanical locking means (6) made in one piece with the panel (1) which, when two of such panels (1) are coupled to each other, prevent the drifting apart of these floor panels (1) into a direction (R) perpendicular to the related edges (2-3, 26-27) and parallel to the underside (7) of the coupled floor panels (1), characterized in that the coupling parts (4-5, 28-29) are provided with means which, in the engaged condition of two or more of such floor panels (1), exert a tension force upon each other which forces the floor panels (1) towards each other, said means comprising an elastically bendable portion which, in the engaged condition, is at least partially bent and in this manner provides the aforementioned tension force.

2. Floor panel according to claim 1, characterized in that the coupling parts and locking means are configured such that, when two of such panels are coupled to each other, in the engagement direction, apart from a contact formed by contact surfaces (38-39, 73-74) delivering the tension force, there exists only one substantial contact point between two coupled floor panels (1), which is formed by a section (84) at the location of the top side of the floor panels (1).

3. Floor panel according to claim 1 or 2, characterized in that the elastically bendable portion consists of a lip, preferably the lip (23-43) limiting the lower side of the aforementioned groove (10).

4. Floor panel according to claim 3, characterized in that the bendable portion which, in coupled condition of two of such panels, is bent out in coupled condition is formed by the lower lip (23-43) of said groove (10-32) whereby this lip (23-43) in coupled condition is bent out only downwardly.

5. Floor panel according to claim 3 or 4, characterized in that the bendable portion is provided with a contact surface (39-73) which inwardly slopes downward.

6. Floor panel according to claim 5, characterized in that, when coupled to a similar panel, said contact surface (39-73) co-operates with a corresponding contact surface (38-74) and in that said co-operating contact surfaces define a tangent line (L) which forms an angle (A) with the underside (7) of the floor panels (1) which is 30° to 70° .

7. Floor panel according to any of the claims 3 to 6, characterized in that the locking means (6) at least consist of, on the one hand, a recess (13-36) which is provided in said lip (23-43), more particularly in the lower lip (23-43) which borders said groove, and, on the other hand, a protrusion which is located at said tongue (9-31), whereby, in coupled condition of two panels (1), the protrusion of one of said panels (1) co-operates with the recess of the other panel (1), said recess and protrusion defining contact surfaces (38-39, 73-74), the contact of which results in said tension force.

8. Floor panel according to claim 7, characterized in that the thickness of the lower lip (23-43) increases from the deepest point of the recess towards the innermost point of the groove (10-32).

9. Floor panel according to claim 7 or 8, characterized in that the tongue (9-31) and groove (10-32) have a shape such that in coupled condition of two floor panels (1) there exists a chamber (81) between those sides of the protrusion and the recess (36) that are located opposite to the sides at which the contact surfaces (39-73) are formed.

10. Floor panel according to any of claims 7 to 9, characterized in that the coupling parts (4-5) show one of the following or the combination of two or more of the following features:

- roundings (79-80) at the edges of the locking elements (33-34);
- dust chambers or similar (21-44-81) between all sides of the engaged floor panels (1) which are directed laterally towards each other;
- a ramp surface (41-83), formed at the free extremity of the lower lip (43);
- contact surfaces (85-86), more particularly abutment surfaces, formed by the upper side of the tongue (9) and the upper side of the groove (10) which, over the largest portion of their length, run parallel to the plane which is defined by the floor panels (1).

11. Floor panel according to any of the preceding claims, characterized in that the groove is bordered by an upper lip and a lower lip and that the lip (23-43) bordering the lower side of the groove (11-32) extends beyond the lip (22-42) bordering the upper side of the groove (10-32).

12. Floor panel according to claim 11, characterized in that lower lip extends beyond the upper lip, whereby the difference (E) between the lips measured in the plane of the floor panel is smaller than one time the total thickness (F) of the floor panel (1).

13. Floor panel according to any of the preceding claims, characterized in that the locking means (6) comprise locking elements (13-34) which are located in the portion of the lower lip (23-43) which extends beyond the upper lip (22-42).

14. Floor panel according to any of the preceding claims, characterized in that the coupling parts (4-5, 28-29) have such a shape that two subsequent floor panels (1) can be engaged into each other by shifting them laterally together as well as by turning, thereby in particular allowing a snapping together action.

15. Floor panel according to any of the preceding claims, characterized in that the groove is bordered by an upper lip and a lower lip and in that the lower lip (23-43) has a thickness which is smaller than the thickness of the upper lip (22-42).

16. Floor panel according to any of the preceding claims, characterized in that the panels (1) have a core made of HDF board or MDE board, whereby said coupling means, inclusive said bendable portion, are substantially formed out of said board such that the tension force is delivered by the elasticity of the HDF or MDF.

17. Floor panel according to any of the preceding claims, characterized in that the panels (1) are rectangular; in that the panels (1) are provided with coupling parts and locking means (6) at both pairs of opposite edges; and in that the means providing in the tension force are integrated at both pairs of edges such that the panels (1) in engaged condition are forced to each other at all coupled edges.

18. Floor panel according to any of the preceding claims, characterized in that the panels (1) at least at two opposite edges are provided of coupling parts which allow to couple the panels (1) at these edges at least by rotation, whereby as the result of the angling down of the panels (1) the elastically bendable portion is bent; and in that the panels (1) at least at the two other opposite edges are provided with coupling parts which allow to couple the panels (1) at these edges at least by shifting, where by as the result of this shifting also the elastically bendable portion at these edges remains in a bent condition.

19. Floor panel according to any of the preceding claims, characterized in that the floor panels (1) are realized as laminated flooring, whereby on the core (8) one or more layers, among which a decorative layer (55) forming said decorative surface, are provided and whereby a backing layer (58) is provided at the underside (7).

20. Floor panel, according to any of claims 1 to 19, for realizing a floor covering whereby the lower lip (23-43) which limits the lower side of the groove (10), extends beyond the upper lip (22-42) and whereby said locking means (6) comprise a portion which inwardly slopes downward, which portion, at least partially, is located in the portion of the lower lip (23-43) which extends beyond the upper lip (22-42), whereby this portion, in the coupled condition of two of such panels (1), co-operates with a surface at the lower side of the tongue, which is also inclined, and in that said coupling means and integrated locking means are configured such that two of such panels (1) can be assembled by applying the steps of:

- laying a first of said hard floor panels (1); and
- coupling a second panel to said first panel, by fitting the tongue and groove into each other, thereby providing that the lower lip is bent out in coupled condition, such that said lip, by means of the inclined portions provides in a force by which the panels (1) are permanently urged towards each other.

21. Floor covering, characterized in that it is composed of a plurality of panels as described in any of claims 1 to 20.

22. Floor covering according to claim 21, characterized in that the floor panels (1) are connected free of glue, such that they can be disassembled and be re-used.

23. Method for manufacturing floor panels according to any of claims 1 to 20, characterized in that the tongue (9-31) and/or groove (10-32) is realized by means of a milling process with at least two subsequent milling cycles by means of milling cutters (63-64-65-66-67-68-69-70) which are positioned in different angles in respect to the related floor panel (1).

24. Method according to claim 23, characterized in that during each of the aforementioned milling cycles each time substantially the final shape of one flank (71-72), either of the tongue or to the groove, is realized.

25. Method according to claim 23 or 24, characterized in that for the aforementioned two milling cycles milling cutters (63-64-65-66-67-68-69-70) are applied which extend outside the groove (10-32), respectively the tongue (9-31), and more particularly show diameters (G) which are at least 5 times larger than the thickness (F) of the floor panels (1), and preferably even at least 20 times larger than the thickness (F) of the floor panels (1).

26. Method according to any of the claims 23 to 25, characterized in that at all four sides of the floor panel (1) a profile is provided and that the floor panels (1) are displaced according to two perpendicular movements (V1-V2), whereby during one of the movements profiles at two opposite edges are provided, whereas during the other movement profiles are provided at the small edges.

2.8. In the uncontested Dutch translation, the claims read as follows:

1. Hard vloerpaneel voor het realiseren van een vloerbekleding, waarbij dit vloerpaneel (1) minstens aan de randen van twee tegenovergestelde zijden (2-3, 26-27) is voorzien van koppeldelen (4-5, 28-29), die toelaten dat twee van dergelijke panelen met elkaar kunnen samenwerken, waarbij deze koppeldelen (4-5, 28-29) hoofdzakelijk zijn uitgevoerd in de vorm van een tand (9-31) en een groef (10-32) en waarbij deze koppeldelen zijn voorzien van geïntegreerde mechanische vergrendelingsmiddelen (6), gemaakt in één stuk uit het paneel (1), die, wanneer twee van dergelijke panelen (1) aan elkaar gekoppeld zijn, verhinderen dat deze vloerpanelen (1) uit elkaar schuiven in een richting (R) loodrecht op de betreffende randen (2-3, 26-27) en parallel aan de onderzijde (7) van de gekoppelde vloerpanelen (1), daardoor gekenmerkt dat de koppeldelen (4-5, 28-29) zijn uitgerust met middelen die, in de verbonden toestand van twee of meer van dergelijke vloerpanelen (1), een spankracht op elkaar uitoefenen die de vloerpanelen (1) naar elkaar toe dwingt, waarbij deze middelen een elastisch buigbaar gedeelte vertonen dat, in de verbonden toestand, tenminste gedeeltelijk verbogen is en op deze manier de voornoemde spankracht verschaft.

2. Vloerpaneel volgens conclusie 1, daardoor gekenmerkt dat de koppeldelen en de vergrendelingsmiddelen zodanig gevormd zijn dat, wanneer twee van dergelijke panelen aan elkaar gekoppeld zijn, er in de verbindingsrichting, naast een contact gevormd door contactvlakken (38-39, 73-74) die de spankracht verschaffen, slechts één substantieel raakpunt bestaat tussen twee gekoppelde vloerpanelen (1), bestaande uit een gebied (84) ter hoogte van de bovenzijde van de vloerpanelen (1).

3. Vloerpaneel volgens conclusie 1 of 2, daardoor gekenmerkt dat het elastisch buigbaar gedeelte bestaat uit een lip, bij voorkeur de lip (23-24) die de onderzijde van de voornoemde groef (10) begrenst.

4. Vloerpaneel volgens conclusie 3, daardoor gekenmerkt dat het buigbaar gedeelte dat in de gekoppelde toestand van twee van dergelijke panelen is uitgebogen, gevormd wordt door de onderste lip (23-43) van voornoemde groef (10-32), waarbij deze lip (23-43) in gekoppelde toestand enkel naar beneden toe is uitgebogen.

5. Vloerpaneel volgens conclusie 3 of 4, daardoor gekenmerkt dat het buigbaar gedeelte is voorzien van een contactvlak (39-73) dat inwaarts naar beneden helt.

6. Vloerpaneel volgens conclusie 5, daardoor gekenmerkt dat, wanneer het gekoppeld is aan een gelijkaardig paneel, voornoemd contactvlak (39-73) samenwerkt met een overeenkomstig contactvlak (38-74) en dat voornoemde samenwerkende contactvlakken een raaklijn (L) definiëren die een hoek (A) vormt met de onderzijde (7) van de vloerpanelen (1) die 30° à 70° bedraagt.

7. Vloerpaneel volgens één van de conclusies 3 tot 6, daardoor gekenmerkt dat de vergrendelingsmiddelen (6) minstens bestaan uit, enerzijds, een uitsparing (13-36) die is aangebracht in voornoemde lip (23-43), meer speciaal in de onderste lip (23-43) die de groef begrenst, en, anderzijds, een uitsteeksel dat zich aan de voornoemde tand (9-31) bevindt, waarbij in de gekoppelde toestand van twee panelen (1), het uitsteeksel van één van voornoemde panelen (1) samenwerkt met de uitsparing van het andere paneel (1), waarbij deze uitsparing en het uitsteeksel contactvlakken (38-39, 73-74) definiëren, waarvan het contact resulteert in voornoemde spankracht.

8. Vloerpaneel volgens conclusie 7, daardoor gekenmerkt dat de dikte van de onderste lip (23-43) toeneemt vanaf het diepste punt van de uitsparing naar het binnenste punt van de groef (10-32).

9. Vloerpaneel volgens conclusie 7 of 8, daardoor gekenmerkt dat de tand (9-31) en groef (10-32) een zodanige vorm vertonen dat er in de gekoppelde toestand van twee vloerpanelen (1) een kamer (81) bestaat tussen die zijden van het uitsteeksel en de uitsparing (36) die tegenover de zijden gelegen zijn waar de contactvlakken (39-73) zijn gevormd.

10. Vloerpaneel volgens één van de conclusies 7 tot 9, daardoor gekenmerkt dat de koppeldelen (4-5) één van de volgende of de combinatie van twee of meer van de volgende eigenschappen vertonen:

- afrondingen (79-80) aan de randen van de vergrendelingselementen (33-34);
- stofkamers of dergelijke (21-44-81) tussen alle zijden van de verbonden vloerpanelen (1) die lateraal naar elkaar gekeerd zijn;
- een oplooppvlak (41-83) aan het uiteinde van de onderste lip (43);
- contactvlakken (85-86), meer speciaal aanslagvlakken, gevormd door de bovenzijde van de tand (9) en de bovenzijde van de groef (10) die, over het grootste gedeelte van hun lengte, parallel, verlopen aan het vlak dat door de vloerpanelen (1) wordt gedefinieerd.

11. Vloerpaneel volgens één van de voorgaande conclusies, daardoor gekenmerkt dat de groef begrensd wordt door een bovenste lip en een onderste lip en dat de lip (23-43) die de onderzijde van de groef (11-32) begrenst voorbij de lip (22-42) uitsteekt die de bovenzijde van de groef (10-32) begrenst.

12. Vloerpaneel volgens conclusie 11, daardoor gekenmerkt dat de onderste lip voorbij de bovenste lip uitsteekt, waarbij het verschil (E) tussen de lippen gemeten in het vlak van het vloerpaneel kleiner is dan één keer de totale dikte (F) van het vloerpaneel (1).

13. Vloerpaneel volgens één van de voorgaande conclusies, daardoor gekenmerkt dat de vergrendelingsmiddelen (6) vergrendelingselementen (13-34) bevatten die zich in het gedeelte van de onderste lip (23-43) bevinden dat voorbij de bovenste lip (22-42) uitsteekt.

14. Vloerpaneel volgens één van de voorgaande conclusies, daardoor gekenmerkt dat de koppeldelen (4-5, 28-29) een zodanige vorm hebben dat twee opeenvolgende vloerpanelen (1) aan elkaar kunnen worden verbonden zowel door ze zijdelings in elkaar te schuiven als door middel van wentelen, waarbij zij meer speciaal een in elkaar klikken toelaten.

15. Vloerpaneel volgens één van de voorgaande conclusies, daardoor gekenmerkt dat de groef begrensd wordt door een bovenste lip en een onderste lip en dat de onderste lip (23-43) een dikte heeft die kleiner is dan de dikte van de bovenste lip (22-42).

16. Vloerpaneel volgens één van de voorgaande conclusies, daardoor gekenmerkt dat de panelen (1) een kern hebben die gemaakt is van HDF-plaat of MDF-plaat, waarbij voornoemde koppelmiddelen, met inbegrip van voornoemd buigbaar gedeelte, hoofdzakelijk gevormd zijn uit voornoemde plaat, zodanig dat de spankracht wordt geleverd door de elasticiteit van de HDF of MDF.

17. Vloerpaneel volgens één van de voorgaande conclusies, daardoor gekenmerkt dat de panelen (1) rechthoekig zijn; dat de panelen (1) zijn voorzien van koppeldelen en vergrendelingsmiddelen (6) aan beide paren tegenovergestelde randen; en dat de middelen die de spankracht leveren geïntegreerd zijn in de beide paren van randen, zodanig dat de panelen (1) in verbonden toestand aan alle gekoppelde randen naar elkaar toe gedwongen worden.

18. Vloerpaneel volgens één van de voorgaande conclusies, daardoor gekenmerkt dat de panelen (1) ten minste aan twee tegenovergestelde randen voorzien zijn van koppeldelen die het mogelijk maken de panelen (1) aan deze randen te koppelen, ten minste door middel van een rotatie, waarbij als gevolg van het naar beneden wentelen van de panelen (1) het elastisch buigbaar gedeelte verbogen wordt; en dat de panelen (1) ten minste aan de twee andere tegenovergestelde randen zijn voorzien van koppeldelen die het mogelijk maken om de panelen (1) aan deze randen te koppelen, ten minste door ze in elkaar te schuiven, waarbij als gevolg van dit verschuiven het elastisch buigbaar gedeelte aan deze randen eveneens verbogen blijft.

19. Vloerpaneel volgens één van de voorgaande conclusies, daardoor gekenmerkt dat de vloerpanelen (1) zijn uitgevoerd als laminaatvloer, waarbij op de kern (8) één of meerdere lagen zijn aangebracht, waaronder een dessinlaag (55) die het sieroppervlak vormt, en waarbij een ruglaag (58) is aangebracht tegen de onderzijde (7).

20. Vloerpaneel volgens één van de conclusies 1 tot 19, voor het realiseren van een vloerbekleding, waarbij de onderste lip (23-43) die de onderzijde van de groef (10) begrenst voorbij de bovenste lip (22-42) uitsteekt en waarbij voornoemde vergrendelingsmiddelen (6) een gedeelte omvatten dat inwaarts naar beneden helt, waarbij dit gedeelte zich ten minste gedeeltelijk in het gedeelte van de onderste lip (23-43) bevindt dat voorbij de bovenste lip (22-42) uitsteekt, waarbij dit gedeelte, in de gekoppelde toestand van twee van dergelijke panelen (1), samenwerkt met een eveneens hellend vlak aan de onderzijde van de tand, en waarbij voornoemde koppelmiddelen en geïntegreerde vergrendelingsmiddelen zodanig zijn gevormd dat twee van dergelijke panelen (1) kunnen worden samengevoegd door het toepassen van volgende stappen:

- het leggen van een eerste van voornoemde harde vloerpanelen (1);
- het koppelen van een tweede paneel aan het voornoemde eerste paneel door de tand en groef in elkaar te passen, waarbij ervoor wordt gezorgd dat de onderste lip in de verbonden toestand uitgebogen is, zodanig dat deze lip, door middel van de schuine gedeelten, een kracht levert die de panelen (1) permanent naar elkaar dwingt.

21. Vloerbekleding, daardoor gekenmerkt dat zij is samengesteld uit een veelvoud van panelen zoals beschreven in één van de conclusies 1 tot 20.

22. Vloerbekleding volgens conclusie 21, daardoor gekenmerkt dat de vloerpanelen (1) zonder lijm zijn verbonden, zodanig dat zij gedemonteerd en opnieuw gebruikt kunnen worden.

23. Werkwijze voor het vervaardigen van vloerpanelen volgens één van de conclusies 1 tot 20, daardoor gekenmerkt dat de tand (9-31) en/of groef (10-32) wordt vervaardigd door middel van een freesproces bestaande uit ten minste twee opeenvolgende freesgangen met behulp van

frezen (63-64-65-66-67-68-69-70) die onder verschillende hoeken geplaatst zijn ten opzichte van liet vloerpaneel (1) in kwestie.

24. Werkwijze volgens conclusie 23, daardoor gekenmerkt dat gedurende elk van voornoemde freesgangen telkens in hoofdzaak de uiteindelijke vorm van één flank (71-72), hetzij van de tand, hetzij van de groef, wordt gerealiseerd.

25. Werkwijze volgens conclusie 23 of 24, daardoor gekenmerkt dat voor bovengenoemde twee freesgangen frezen (63-64-65-66-67-68-69-70) worden aangewend die buiten de groef (10-32), respectievelijk tand (9-31) uitsteken, en meer speciaal nog diameters (G) vertonen die ten minste 5 keer groter zijn dan de dikte (F) van de vloerpanelen (1), en bij voorkeur zelfs 20 keer groter zijn dan de dikte (F) van de vloerpanelen (1)

26. Werkwijze volgens één van de conclusies 23 tot 25, daardoor gekenmerkt dat aan alle vier zijden van het vloerpaneel (1) een profilering wordt aangebracht en dat de vloerpanelen (1) worden verplaatst volgens twee loodrechte bewegingen (V1-V2), waarbij gedurende één van deze bewegingen profileringen worden aangebracht aan twee tegenovergestelde randen, terwijl gedurende de andere beweging profileringen worden aangebracht op de korte randen.

2.9. The description of the patent includes the following, among other things:

[0001] This invention relates to hard floor panels, a floor covering, consisting of hard floor panels, as well as to a method for manufacturing such floor panels.

[0002] In first instance, the invention is intended for so-called laminated floors, but generally it can also be applied for other kinds of floor covering, consisting of hard floor panels, such as veneer parquet, prefabricated parquet, or other floor panels which can be compared to laminated floor.

[0003] It is known that such floor panels can be applied in various ways.

[0004] According to a first possibility, the floor panels are attached at the underlying floor, either by glueing or by nailing them on. This technique has as a disadvantage that it is rather complicated and that subsequent changes can only be made by breaking out the floor panels.

[0005] According to a second possibility, the floor panels are installed loosely onto the underground, whereby the floor panels mutually match into each other by means of a tongue and groove coupling, whereby mostly they are glued together in the tongue and groove, too. The floor obtained in this manner, also called a floating parquet flooring, has as an advantage that it is easy to install and that the complete floor surface can move which often is convenient in order to receive possible expansion and shrinkage phenomena.

[0006] A disadvantage with a floor covering of the above-mentioned type, above all, if the floor panels are installed loosely onto the underground, consists in that during the expansion of the floor and its subsequent shrinkage, the floor panels themselves can drift apart, as a result of which undesired joints can be formed, for example, if the glue connection breaks.

[0007] In order to remedy this disadvantage, techniques have already been thought of whereby connection elements made of metal are provided between the single floor panels in order to keep them together. Such connection elements, however, are rather expensive in manufacturing them and, furthermore, their provision or the installation thereof is a time-consuming occupation.

[0008] Examples of embodiments which apply such metal connection elements are described, among others, in the documents WO 94/26999 and WO 93/13280.

[0009] Furthermore, couplings are known which allow to snap floor parts into each other, a.o. from the documents WO 94/1628, WO 96/27719 and WO 96/27721. The snapping-together effect obtained with these forms of embodiment, however, does not guarantee a 100-percent optimum counteraction against the development of gaps between the floor panels, more particularly, because in fact well-defined plays have to be provided in order to be sure that the snapping-together is possible.

[0010] From GB 424.057, a coupling for parquetry coupling parts is known which, in consideration of the nature of the coupling, only is appropriate for massive wooden parquetry.

[0011] Furthermore, there are also couplings for panels known from the documents GB 2.117.813, GB 2.256.023 and DE 3.544.845. These couplings, however, are not appropriate for connecting floor panels.

[0012] The invention aims at an improved floor covering of the aforementioned type, the floor panels of which can be coupled to each other in an optimum manner and/or the floor panels of which can be manufactured in a smooth manner, and whereby preferably one or more of the aforementioned disadvantages are excluded.

[0013] The invention also aims at a floor covering which shows the advantage that no mistake during installing, such as gaps and such, can be created.

[0014] Furthermore, the invention also aims at a floor covering whereby the subsequent development of gaps is excluded or at least counteracted in an optimum manner, whereby also the possibility of the penetration of dirt and humidity is minimized.

[0015] To this aim, the invention relates to a floor panel, more particularly a hard floor panel for realizing a floor covering, whereby this floor panel at least at the edges of two opposite sides is provided with coupling parts, which allow that two of such panels can co-operate with each other, whereby these coupling parts are substantially in the form of a tongue and a groove and whereby these coupling parts are provided with integrated mechanical locking means made in one piece with the panel which, when two of such panels are coupled to each other, prevent the drifting apart of these floor panels into a direction perpendicular to the related edges and parallel to the underside of the coupled floor panels, characterized in that the coupling parts are provided with means which, in the engaged condition of two or more of such floor panels, exert a tension force upon each other which forces the floor panels towards each other, said means comprising an elastically bendable portion which, in the engaged condition, is at least partially bent and in this manner provides the aforementioned tension force.

[0016] The invention also relates to a floor covering composed of such panels.

[0017] As a result of this is effected that not only during installing the formation of gaps is counteracted, but also in a later stage the development of gaps, as a result of which causes whatsoever, is counteracted.

[0018] Duo to the fact that the coupling parts provide for an interlocking free from play, as well due to the fact that these coupling parts are manufactured in one piece, from the basic material of the floor panels, a perfect connection between adjacent floor panels can always be guaranteed, even with repeated expansion and shrinkage of the floor surface.

(...)

[0085] In the figures 22 to 25, a particularly preferred form of embodiment of a floor panel 1 according to the invention is represented. Hereby, the parts which are taken over from the foregoing forms of embodiment are indicated with corresponding references.

[0086] An important characteristic herein consists in that the coupling parts 4-5 are provided with locking means 6 which, in engaged condition, exert a tension force upon each other, as a result of which the engaged floor portions 1 are forced towards each other. As represented, this is realized preferably by providing the coupling parts with an elastically bendable portion, in this case the lip 43, which, in engaged condition, is at least partially bent and in this way creates a tension force which provides for that the engaged floor panels 1 are forced towards each other. The hereby resulting bending V , as well as the tension force K resulting herefrom, are indicated in the enlargement of figure 23.

[0087] In order to obtain that the tension force K results in pressing together the engaged floor panels 1 the bendable portion, in this case the lip 43, preferably is provided, as represented, with an inwardly inclined contact surface 73 which preferably can cooperate with a corresponding contact surface 74. These contact surfaces 73-74 are similar to the aforementioned contact surfaces 39-38 and also similar to the inclined portions of the lower lip of figures 2 to 4.

[0088] In the figures 2 and 5, the portions form complementary matching shapes; it is, however, clear that by a modification, also a tension effect similar as in figure 23 can be realized.

[0089] Due to, on one hand, the contact under the angle A , and, on the other hand, the fact that a tension force K is created, a force component K_1 is effected, as a result of which the floor panels 1 are drawn against each other.

(...)

[0092] It is noted that the bending V is relatively small, for example, several hundredths up to several tenths of a millimeter, and does not have an influence upon the placement of the floor covering. Furthermore is noted that such floor covering generally is placed upon an underlayer which is elastically compressible, as a result of which the bending V of the lip 43 exclusively results in the fact that the underlayer locally is compressed somewhat more.

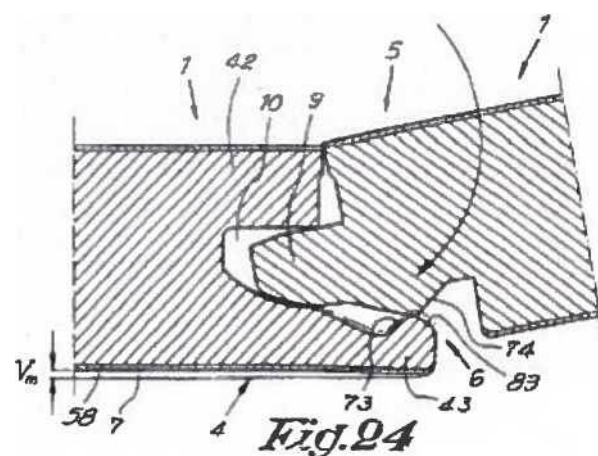
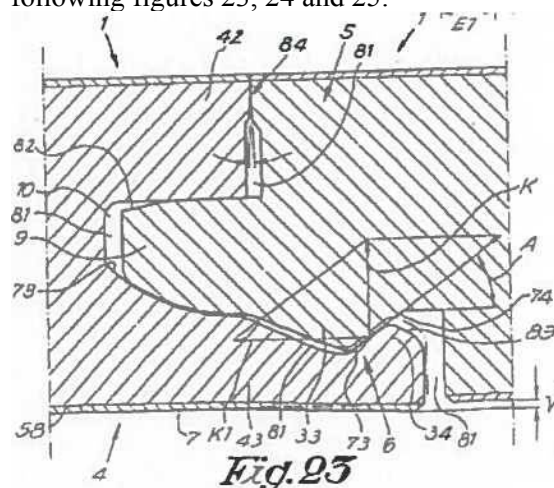
[0093] Due to the fact that the lip 43 is bent apart and that it remains somewhat bent apart in engaged position, also the advantage is effected that, when exerting a pressure upon the floor covering, for example, when placing an object thereupon, the pressing-together force is enhanced and, thus the development of gaps is counteracted even more.

(...)

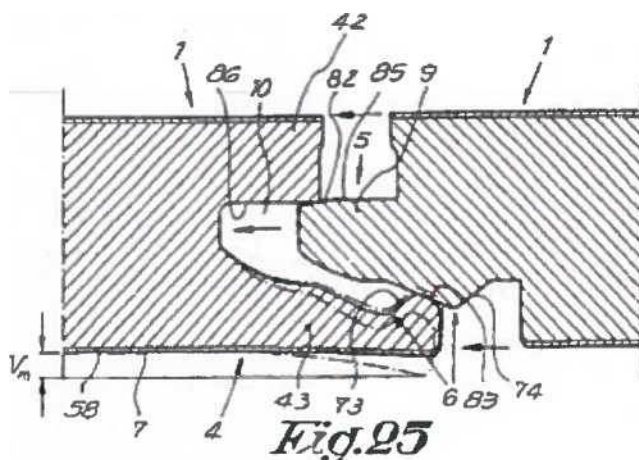
[0097] A further particular characteristic of the embodiment of figures 22 to 25 consists in that the floor panels 1 can be engaged by means of a turning movement, as represented in figure 24, as well as by means of shifting them towards each other, as represented in figure 25, preferably in such a manner that, during the engagement by means of the turning movement, a maximum bending V_m results in the coupling parts, more particularly in the lip 43, which bending V_m is less pronounced, if not non-existent, as in the figures 2 to 4, in comparison to the bending V_m which results when the floor panels 1 are engaged by means of shifting them towards each other.

(...)

2.10. The patent includes, inter alia, the following figures 23, 24 and 25:



Floor panels can be engaged by means of a turning movement, as represented in figure 24 (see paragraph [0097]).



Floor panels can be engaged by means of shifting them towards each other, as represented in figure 25 (see paragraph [0097]).

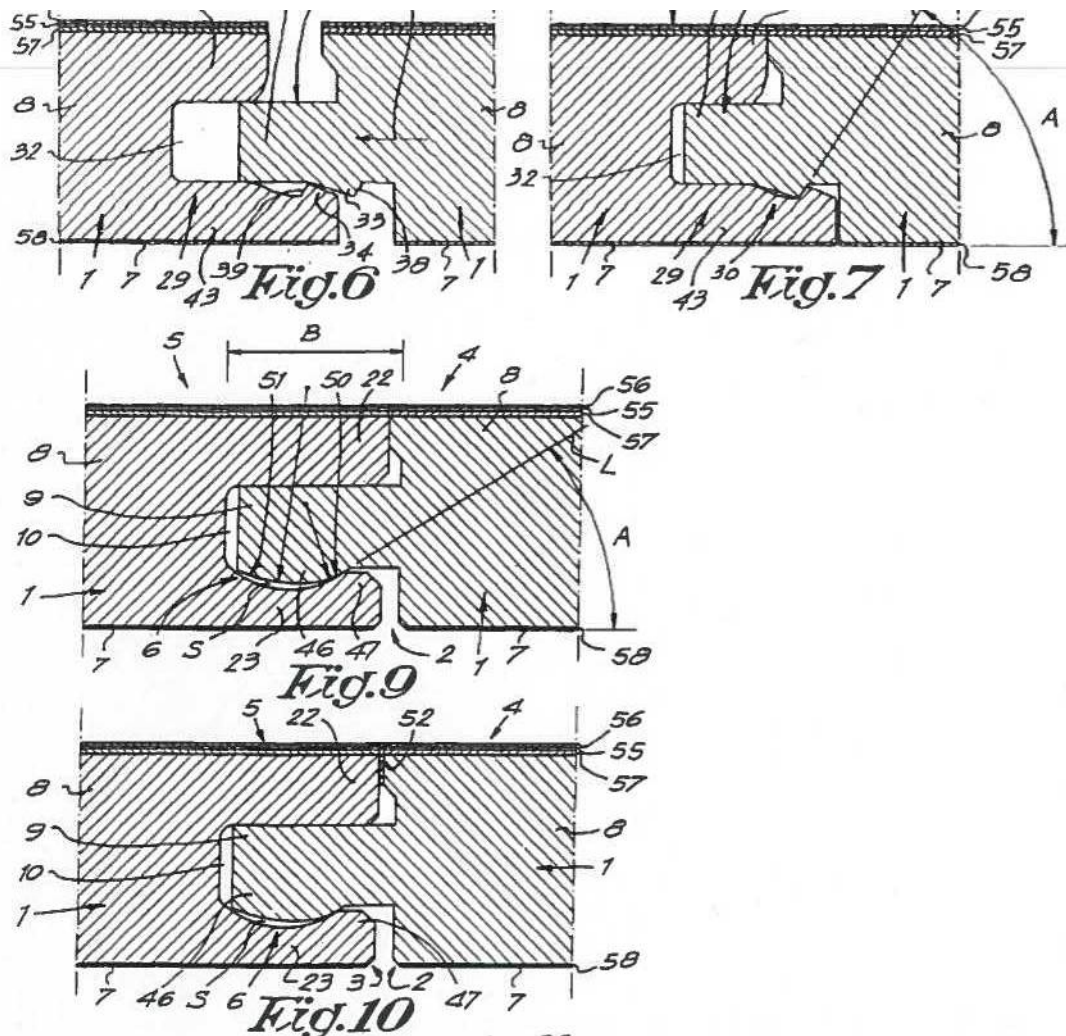
2.11. The first prior document BE 527 provides, inter alia, the following and this documents contains, inter alia, the figures shown below.

“Furthermore, the invention also aims at a floor covering whereby the subsequent development of gaps is excluded or at least counteracted in an optimum manner, whereby also the possibility of the penetration of dirt and humidity is minimised. ” [p. 2 penultimate paragraph]

“Due to the fact that the coupling parts provide for an interlocking free from play, as well as due to the fact that these coupling parts are manufactured in one piece, from the basic material of the floor panels, a perfect connection between adjacent floor panels can always be guaranteed, even with repeated expansion and shrinkage of the floor surface. ” [p. 3 penultimate paragraph]

“The fact that the invention is applied to floor panels the basic material of which consists of the material described above, offers the advantage that with the processing of this material, very smooth surfaces are obtained whereby very precise couplings can be realized, which, in first instance, is important in the case of a snap-together connection and/or turning connection free from play. Also, very special forms of coupling parts can be manufactured in a very simple manner because the aforementioned kinds of material can be processed particularly easy.

The inventor also found out that the aforementioned materials, in particular HDF and MDF, show ideal features in order to realize a connection, such as mentioned above, as these materials show the right features in respect to elastic deformation in order to, on one hand, realize a snap-together effect, and, on the other hand, receive expansion and shrinkage forces in an elastic manner, whereby it is avoided that the floor panels come unlocked or are damaged in an irreparable manner. ” [p. 4 penultimate 2 paragraphs and top of p. 5]

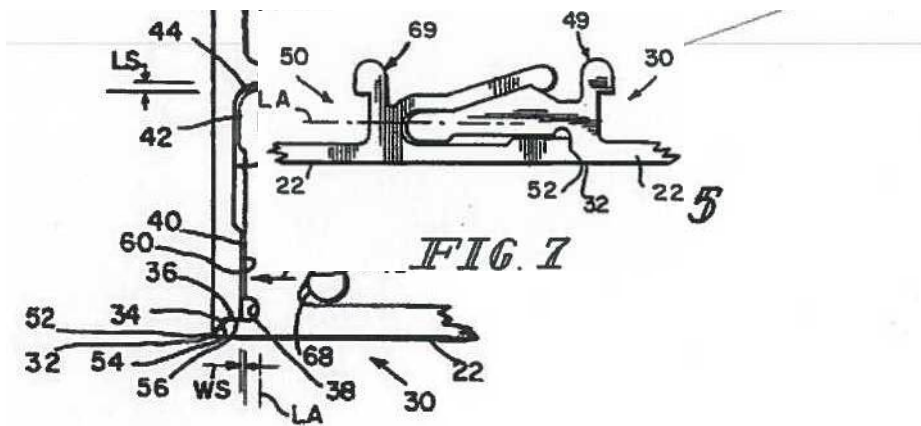


2.12. The second priority document BE 344 provides, inter alia, the following and this document contains, inter alia, the figures shown below.

“In a first important preferred form of embodiment, the coupling parts are provided with locking means which, in the engaged position of two or more of such floor panels, exert a tension force upon each other which force the floor panels towards each other. As a result of this is effected that not only during installing the formation of gaps is counteracted, but also in a later stage the development of gaps, as a result of which causes whatsoever, is counteracted.” [p. 4 2 paragraph]

“Due to the fact that the coupling parts provide for an interlocking free from play, as well as due to the fact that these coupling parts are manufactured in one piece, from the basic material of the floor panels, a perfect connection between adjacent floor panels can always be guaranteed, even with repeated expansion and shrinkage of the floor surface.”

This combination of characteristics can be combined or not with the aforementioned characteristic which states that the locking means exert a tension force upon each other. [p. 5 paragraphs 2 and 3]



ABSTRACT:

A latch coupling includes a male and female member having complementary latching portions, all of which are dimensioned and positioned so as to assure that a first surface, which extends from the edge at which the two exterior surfaces are to meet, engage in their mating position before second surfaces which extend from the first surfaces during the insertion along the longitudinal axis of the male and female member. The complementary latching portions apply continuous mating forces to the first and second surfaces of the complementary shoulders when mated.

column 1, lines 19-29:

"One form of locking joint used in the prior art to interconnect a pair of prefabricated panels includes a tongue-in-groove, as illustrated in U.S. Pat. No. 2,430,200. Because the insertion is at an angle relative to the resulting longitudinal axis of the tongue-in-groove insertion to form a flush or planar structure. This roll action produces an exposed seam at the junction. Also, there is no locking device to prevent the unrolling except possibly loading force in the installed condition. Without a locking device, the structure is not stable. "

column 1, lines 54-56:

"Thus, it is an object of the present invention to provide a new interlocking joint coupling for interlocking elements which provides a blind seam. "

column 1, lines 63-66:

"A still even further object of the present invention is to provide an interlocking joining coupling for elements or panels which sets up structural farces to assure the stability of the resulting product. "

column 2, lines 50-54, column 8, lines 46-51 and in particular column 5, lines 44-51:

"This force vector is transferred to the first and second surfaces 34,36 and 54,56 of the male and female members, respectively, to provide a continuous mating force. Thus, the action of the protrusion 68 on the latching surface 48 not only produces a closing action for the surfaces during the insertion or mating process, but maintains the mated elements under continuous forces. "

column 4, lines 7-10:

"The bend or angled surface 66 forms with the base of the recess 64 forms a living hinge and allows leg 66 and protuberance 68 to flex. "

column 4, lines 58-61:

"The ultimate objective is that edges 32 and 52 of the male and female member, respectively, always meet and superimpose so as to form a blind or hidden seam without a gap there between. "

Claims:

(...)

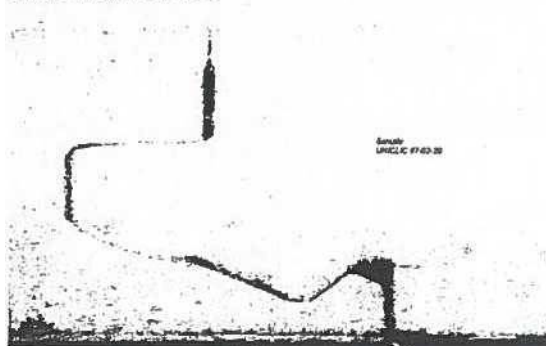
11. A coupling for joining exterior surfaces of two structural elements along a substantially blind seam line comprising:

- *a male means and a female means on an interior surface adjacent a respective edge which are to meet along said line when mated;*
- *complementary shoulders on said male and female means, each shoulder having a first surface extending from and intersecting a respective edge and a second surface extending from said first surface;*
- *said female means including a recess extending from its shoulder and having a longitudinal axis and said male means includes a male portion extending from its shoulder and having a longitudinal axis which is parallel to said recesses' longitudinal axis when mating; and*
- *complementary latching means on said male and female means for latching said male and female means together and applying continuous mating forces to said first and second surfaces of said complementary shoulders when mated after insertion along said longitudinal axis.*

Trade fairs and publications Unilin

2.15. During the Domotex trade fair in January 1997, which was held in Hannover (Germany), Unilin showed samples of its Uniclic product. An image of such a sample is included below (hereinafter the "Domotex sample").

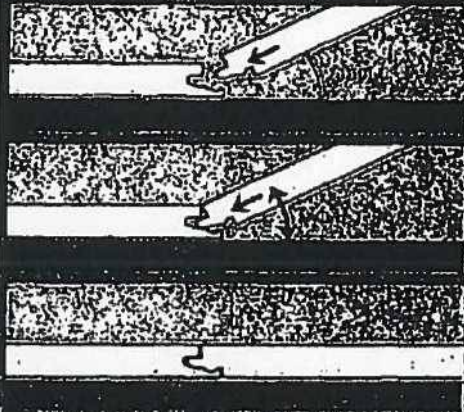
Sample analysed 97-02-20



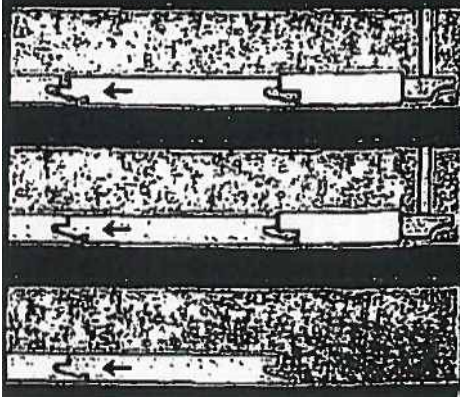
2.16. For the international Batibouw construction trade fair that was held in Brussels (Belgium) from 27 February until 9 March 1997, Unilin published a brochure about its Uniclic system for the glueless installation of its Quick-Step laminate flooring. Among other things, this brochure (hereinafter the “Batibouw brochure”) contains the following text and images:
“No more gaps between laminate flooring boards due to a poor installation job. The Uniclic system ensures that all seams are completely closed. The lower lip of the groove will make sure of this. The end result is a beautiful and solid floor.(...)”

The panels are still fully recyclable. Tongue and groove of the Uniclic panels are fully integrated in the HDF base plate (just as in traditional laminate flooring).”

Het wentelen kan zowel met tand in groef als omgekeerd, met de groef in de tand.



Met behulp van een hamer en de speciale Unielie-stootblok (zit in de Unielie plaatsingskit) worden de panelen geleidelijk in elkaar gestoten, tot tand en groef in elkaar vastklikken.



2.17. A Unilin press release, which was found in the press file of the 1997 Batibouw trade fair and is hereinafter referred to as the “Batibouw press release”, states, *inter alia*, the following:

“UNICLIC SYSTEM (Patent pending)

(...)

Glue is no longer needed.

(...)

Both techniques (turning or shifting, added by the District Court) are based on the elastic properties of the lower lip of the groove, which is made of HDF (...).

The system ensures that all seams close automatically. Floor gaps and the traditional difficulties when installing the first rows are things of the past. (...)

3. The dispute

3.1. After an increase of claim and a change of claim at the hearing, 14F, in a judgment provisionally enforceable insofar as possible, claims

1) revocation of the Dutch part of EP 341, or at least a judicial declaration that the Dutch part of EP 341 is invalid.

2) a judicial declaration that products with 14F’s Click4U technology do not infringe the Dutch and foreign parts of EP 341, alternatively

a judicial declaration that products with 14F’s Click4U technology that do not contain measure (f) of EP 341 do not infringe the Dutch and foreign parts of EP 341;

ordering Unilin to pay the costs of the proceedings to be assessed on the basis of Article 1019h of the Dutch Code of Civil Procedure (hereinafter “DCCP”).

3.2. 14F bases its claims on the arguments that have been presented succinctly below. 3.2.1.

14F’s takes claim 1 as a basis, which is divided into the following submeasures:

(a) Hard floor panel, for realizing a floor covering;

(b) whereby this floor panel at least at the edges of two opposite sides is provided with coupling parts, which allow that two of such panels can be coupled to each other;

(c) wherein these coupling parts are substantially in the form of a tongue and a groove;

(d) and wherein these coupling parts are provided with integrated mechanical locking means, formed in one piece with the panel;

(e) which, when two of such panels are coupled to each other, prevent the drifting apart of these floor panels into a direction (R) perpendicular to the related edges and parallel to the underside of the coupled floor panels;

characterized in that:

(f) the coupling parts are provided with means which, in the engaged condition of two or more of such floor panels exert a tension force upon each other which forces the floor panels towards each other, said means comprising an elastically bendable portion which, in the engaged condition, is at least partially bent and in this manner provides the aforementioned tension force.

Submeasures (a) through (e) pertain to hard floor panels with a mechanical tongue/groove “snap-together” coupling, which prevents the panels from drifting apart after coupling. Such couplings were known from the prior art, as is confirmed in EP 341. According to EP 341, the slightly mismatched coupling under submeasure (f) ensures the continued prevention of the development of gaps/openings between two coupled panels.

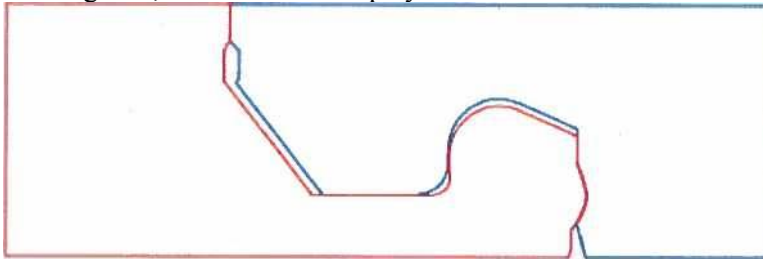
3.2.2. EP 341 cannot claim priority of BE 527. That patent contains neither submeasure (f), nor figures 22-25 that represent measure (f). The reference date is therefore 15 April 1997.

3.2.3. Claim 1 of EP 341 is invalid on the basis of the following grounds.

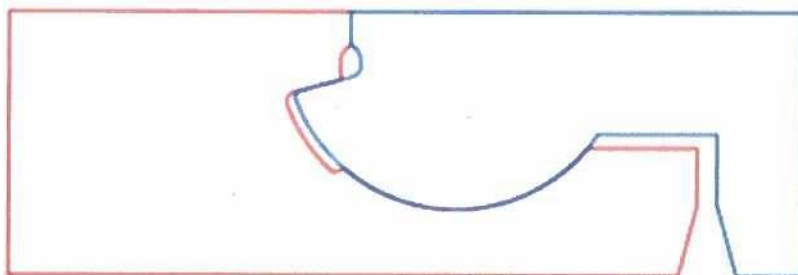
- (i) Claim 1 of EP 341 is not covered by the contents of the original application and is therefore invalid on the basis of added subject matter.
- (ii) Claim 1 of EP 341 is invalid on the basis of public prior use by Unilin. Unilin exhibited the product protected by EP 341 at trade fairs and presented it in various press releases and brochures.
- (iii) Claim 1 of EP 341 is invalid on the basis of public prior use of the so-called Planoquick floor panels by the German company Terbrack.
- (iv) Claim 1 of EP 341 lacks inventive step with respect to (i) US 2,430,200 and US 442, (ii) WO 94/26999 and US 442, (iii) prior use by Unilin and US 442, (iv) WO 96/27721 and US 442 or WO 96/27721 with Seelback's Planoquick panels, (v) such either or not in combination with the knowledge of the average skilled person.

3.2.4. The other claims are likewise invalid. None of the additional measures in the sub claims are either new or inventive.

3.2.5. 14F's Click4U panels do not infringe EP 341, which applies to both the short side and the long side, which will be displayed hereafter.



Short side (3L Triple Lock)



4. The assessment

Jurisdiction

4.1. The District Court has international jurisdiction to hear the claim for revocation of the Dutch part of EP 341 pursuant to article 2 in conjunction with article 22(4) of the Council Regulation (EC) No 44/2001 of 22 December 2000 on jurisdiction and the recognition and enforcement of judgments in civil and commercial matters. The territorial jurisdiction of the

District Court follows from Article 80(2)(a) of the *Rijksoctrooiwet 1995* (Patents Act 1995, hereinafter ‘ROW’). Incidentally, Unilin appeared without challenging the jurisdiction of the District Court. The District Court observes of its own motion with regard to the claimed declaration of non-infringement of foreign parts of EP 341 that 14F did not use the invalidity of said parts as a basis.

Inventive Step

4.2. At the discretion of the District Court, claim 1 of EP 341 is invalid due to a lack of inventive step. The District Court will explain this below.

4.3. The District Court states first and foremost that, according to established case law, there is no inventive step if the average skilled person, starting from the closest prior art, would - and not just could- have solved the problem in the manner that is claimed in the patent.

4.4. Like 14F and Unilin, the District Court starts from the submeasures (a) through (f), which 14F subdivided claim 1 of EP 341 in (see 3.2.1). Sub measures (a) through (e) were known from the prior art, as evidenced by the patent. The invention claimed in EP 341 is therefore characterized by submeasure (f) that ***“the coupling parts are provided with means which, in the engaged condition of two or more of such floor panels, exert a tension force upon each other which forces the floor panels towards each other, said means comprising an elastically bendable portion which, in the engaged condition, is at least partially bent and in this manner provides the aforementioned tension force.”***

4.5. Submeasure (f) is shown in Figure 23 of the patent (see 2.10), and implies that, after coupling it with the tongue of the right-hand panel, the elastic lower lip (43) of the groove (from the left-hand panel) is still bent out (bending V) such that said lower lip (43) permanently exerts a force on the tongue of the right-hand panel. In other words, if the lower lip of the groove remains bent out in coupled condition, this provides in a force by which the floor panels are permanently urged towards each other. Such partial bending of the lower lip of the groove is realized by the contact surfaces 73 of the groove and 74 of the tongue, whereby the lower lip of the groove remains bent out downwardly. In other words, the groove is not quite appropriate.

4.6. According to paragraphs [0015] - [0017] of the patent (see 2.9), submeasure (f) therefore provides not only for counteracting the formation of gaps when installing the floor panels, but also for keeping them connected, with the result that the top side of the coupled floor panels will show no gaps. Paragraph [0092] of the patent provides that the bending V is relatively small, for example, several hundredths up to several tenths of a millimetres and does not have an influence upon the placement of the floor covering.

4.7. There is no disagreement between the parties about the identity of the average skilled person (hereinafter: the skilled person). ABC stated, without being contradicted by 14F, that the skilled person is a technician who works at a company dealing with laminate.

He has expertise in the field of floor coverings and knowledge of connection techniques for floor panels for floor coverings, and he has knowledge of the materials and techniques used to manufacture such floor panels.

- the problem-and-solution-approach

4.8. In the assessment of the inventive step, the District Court will apply the ***problem-and-solution-approach***, which both parties used in their reasoning. First, the ***closest prior art*** must be established in that approach. The closest prior art is the disclosure which discloses the combination of features that provide the most promising springboard in the direction of an obvious development based on the claimed invention. The selection of the closest prior art must involve a technical area/objective that is the same as or closely related to the area/objective of the claimed invention.

4.9. Unilin did not contest that it cannot rely on the first priority date of 11 June 1996 of BE 527. It argued, uncontested, that BE 527 does disclose the elastic deformation of the lower lip of the groove by means of which the snap-together effect is realized. Unilin admits, however, that the measure of the bent part of the lower lip of the groove, which permanently remains in coupled condition and which provides tension force, was described for the first time in the second priority document BE 344 of 15 April 1997. The District Court (and the Opposition Division of the EPO in the preliminary opinion) therefore starts from 15 April 1997 as relevant reference date for determining the prior art.

4.10. Starting from that reference date, the District Court follows 14F's statement that the documents that were disclosed around the Batibouw trade fair of February/March 1997 (see 2.16 and 2.17) can separately or jointly be regarded as the closest prior art (hereinafter jointly referred to as: the Batibouw documents). It should be noted that it is obvious that an average skilled person that visited the Batibouw trade fair have had the brochure shown in 2.16 and the press release referred to in 2.17 at his disposal at the same time. The District Court understands that both documents were in the so-called "press folder" of Unilin concerning the trade fair, so that a skilled person will have gathered the information in both documents which related to the same exhibited floor panel in a single effort. Unilin did not contest the assertion that the Batibouw documents involve the same or a closely related technical area and the same objective as the claimed invention.

4.11. The said documents describe Unilin's Uniclic system for coupling floor panels without glue. The documents describe a system in which the tongue of the one floor panel and the groove of the other floor panel snap together, realizing a connection. They also describe that the 'snap-together effect' can be realized by means of elastic properties of the lower lip of the groove. That description implies that the tongue exerts a downward pressure on the elastic lower lip of that groove, causing it to bent out downwardly, after which the tongue snaps into the groove. Finally, the documents describe that the Uniclic system ensures that all gaps are fully closed and "close automatically". Images of this snap-together system are included in the Batibouw brochure (2.16). The sample exhibited during the Domotex trade fair (2.15) is identical to those images.

4.12. The District Court rejects Unilin's statement that the Batibouw documents describe the 'snap-together' connection from the first priority document BE 527. As 14F rightly argues, the images in the Batibouw brochure (and therefore the sample of the Domotex trade fair as well) bear a strong resemblance to Figure 23 from the second priority document BE 344 and from EP 341. That figure 23 does not appear in BE 527. For example, the lower lip of the groove in Figure 23 has the more 'conical' shape, as is also shown by the lower lip of the groove in the images in the Batibouw-brochure. This conical shape cannot, or at least less explicit, be found in Figures 7, 9 and 10 of BE 527.

4.13. The description of the snap-together system included in the Batibouw documents also deviates from the description of BE 527. The Batibouw documents describe that the gaps

between two floor panels close automatically by means of the snap-together system. Words to that effect are not in BE 527. BE 527 refers to ‘the provision of an interlocking free from play’ securing ‘a perfect connection between adjacent floor panels’ and that ‘the materials used, in particular HDF and MDF, show ideal features in order to realize a connection, such as mentioned above, as these materials show the right features in respect to elastic deformation in order to, on the one hand, realize a snap-together effect, and, on the other hand, to receive expansion and shrinkage forces in an elastic manner, whereby it is avoided that the floor panels come unlocked or are damaged in an irreparable manner’ (see 2.11).

4.14. On the other hand it cannot be established, as 14F argues, that the Batibouw documents disclose the claimed invention of EP 341. As considered above, the text in the Batibouw documents implies that the elastically bendable lower lip of the groove of the one floor panel bends out downwardly by the pressure of the tongue and therefore provides tension force when interlocking the tongue and groove such that the gaps between the two floor panels close. That the elastically bendable lower lip of the groove of the one floor panel is at least partially bent in the engaged condition and provides permanent tension force in this way, is not sufficiently clear and unambiguous from the text of the Batibouw documents. That measure cannot be derived from the images in the Batibouw brochure either. In contrast to Figure 23, these do not show that after coupling of the tongue and groove, the lower lip of the groove remains bent out downwardly, indicated in figure 23 by bending V but also visible in the figure itself. That part of the measure (f) is therefore not disclosed in the Batibouw documents. The documents do not fully anticipate the invention.

4.15. The District Court therefore concludes that the ‘snap-together system’ in the Batibouw documents is a combination of the elements in both BE 527 and EP 341.

- the difference measure and the technical effect

4.16. Starting from the Batibouw documents as closest prior art, the difference measure with respect to claim 1 of EP 341 is that the elastically bendable lower lip of the groove of the one floor panel in the engaged conditions state is at least partially bent and in this way provides permanent tension force on the floor panel to which it is coupled. The technical effect of this measure is that the coupled floor panels are permanently urged towards each other in order to prevent the formation of gaps (even after installation). This difference measure and the technical effect hereof is not in dispute.

- the objective technical problem

4.17. Subsequently, the objective technical problem that is solved with the invention has to be formulated on the basis of the technical effect. The objective technical problem must connect as closely as possible with the problem the patent itself claims to have solved and must be formulated as specific as possible on the basis of the difference measures. The formulation of the problem cannot contain *a pointer* to the solution, but should not be so general that points of agreement with and instructions in the closest prior art are ignored.

4.18. Both parties formulated the problem as ‘the provision of a hard floor panel provided with coupling parts which counteract the formation of gaps in the floor not only during installing the floor but also in a later stage’. The problem formulated by the parties links up with the problem described in paragraph [0014] of the patent as ‘**Furthermore, the invention also aims at a floor covering whereby the subsequent development of gaps is excluded or at least counteracted in an optimum manner.**’ Taking the difference measure into consideration, the District Court more specifically formulates the problem as follows: ‘How can the formation

of gaps between the coupled floor panels be permanently prevented after coupling of hard floor panels by means of a tongue and a groove (as referred to in the Batibouw documents)?' The District Court will take this problem formulation as a starting point below.

- *would the skilled person come to the invention?*

4.19. In the opinion of the District Court, the skilled person faced with the problem formulated above on the relevant (second) priority date without inventive faculty would come to an elastically bendable lower lip of the groove of the one floor panel which in coupled condition is at least partially bent and in this way provides permanent tension force. The District Court will explain this.

4.20. As set out above, it follows from the Batibouw documents that the coupling between the floor panels is accomplished by exerting pressure with the tooth of the one floor panel at the groove of the other floor panel, and that the elastic lower lip of the groove thereby bends out until the tongue snaps into the groove. The skilled person will understand that the automatic closing of the gaps when coupling the floor panels, as disclosed in the Batibouw documents, is the result of a tension force between the tongue and groove interlocking. In the Batibouw brochure (2.16, quote above the images) the full closing of the gaps is attributed explicitly to the elastic lip. Based on his general professional knowledge, he will realize without inventive faculty that if gaps still remain after laying the floor panels, he must make the elastic tension force created by the lower lip permanent. In the opinion of the District Court, the step to then ensure a permanent bent out lower lip of the groove is obvious. Incidentally, Unilin has not argued that the invention lies in acknowledging the problem of gaps arising after laying the floor panels. Nor did Unilin for example explain the other routes the skilled person could have taken to solve the problem. Unilin insufficiently substantiated the assertion that the skilled person would consider such solution unacceptable as in that case the "coupling would be open during use, and would interfere with the underside of the panel" (written pleading 11.3 Unilin), bearing furthermore in mind that these panels are usually placed on a soft surface that will absorb the bending out. That the latter is general professional knowledge already follows from the patent, in which this is stated with so many words in paragraph [0092] of the description (2.9).

4.21. If the skilled person would not already come to the stated solution of the problem based on his general professional knowledge, he would go look for a solution in the prior art. Indeed, the skilled person, although he has a conservative basis attitude, is always motivated to find a solution for the objective technical problem.

4.22. The skilled person would find the solution in US 442. This disclosure pertains to the application of *prefabricated elements* in the building industry and pertains to a locking coupling of *external surfaces*. Unlike Unilin adduces, the fact that the embodiments of US 442 pertain to metal wall panels and not floor panels, does not mean that US 442 does not constitute relevant prior art which the skilled person would consider in finding a solution for his objective technical problem. Claim 11 of US 442 [**check source: 442], for example, claims the invention in general wordings without it being restricted to (metal) wall panels. The skilled person would therefore most certainly consider US 442.

4.23. US 442 aims to provide a gap-free, stable coupling (column 1, lines 56-59). The *abstract* of US 442 provides the following regarding the coupling disclosed therein: "***The complementary latching portions apply continuous mating forces to the first and second surfaces of the complementary shoulders when mated.***" In US 442, this continuous tension

force is effected by an elastically bendable portion of coupling portion 50, which both during the coupling, but also after that, exercises a tension force (referred to as force FL, force FW, and the resultant force vector) on the coupling. These forces force the panels towards each other so as to provide a gap-free coupling (column 5, lines 44 -53 and Figure 5). US 442 describes and shows in Figure 7 that the invention can also be applied to coupling flat surfaces. Contrary to what Unilin believes, the skilled person will have no difficulty to see an application in a floor panel in Figure 7 of US 442 - which shows a planar coupling with an upward directed bending out lip.

4.24. The skilled person who consults US 442 will read therein that the elastic lip which bends out permanently in coupled condition, ensures a permanent tension force which permanently closes the gaps in the coupling of the floor panels. The skilled person accordingly will come to the solution without inventive effort, namely to apply this solution to the coupling already known to him from the Batibouw documents.

4.25. Contrary to what Unilin has adduced, the skilled person will not disregard the applicability of the invention of US 442 on account of the, in that case, two vertically downward protruding edges and the large degree of bending out of the lip. This is no realistic approach to the working method of the skilled person. Indeed, the skilled person will not go search for an entirely new form of coupling of floor panels; he will only search for a solution to the problem as to how to prevent permanent gaps in the coupling known to him. He will therefore not be inclined to use the entire coupling of US 442 in floor panels, but only the solution that a bent out lip in coupled condition provides permanent tension force. The skilled person already finds the pointer to the bending elastic lip to close the gaps in the Batibouw brochure. He will use the solution to obtain permanent tension force by means of a bent out lip in the coupling he knows from the Batibouw documents. The skilled person will realise that the degree to which the lower lip is bent out does not directly influence the flat position of the coupled floor panels because these panels can usually be placed down on a soft subsurface that will absorb the bending (see also 4.20, conclusion).

4.26. Therefore, the skilled person will come to the solution of the objective technical problem based on his general professional knowledge or after consulting US 442.

4.27. Insofar as Unilin advanced that the thin and breakable nature of the MDF/HDF panels stand in the way of the solution, this argument fails. It has not been substantiated and furthermore contradicts the fact that the panels mentioned in the Batibouw documents in HDF are fitted with an elastic lip (which - as the court adds - will bend out significantly when it 'snaps together').

- interim conclusion

4.28. This means that claim 1 of EP 341 lacks inventive step and is therefore invalid.

Other conclusions

4.29. 14F advanced that the sub claims 2 through 22 and method claims 23 through 26 are invalid due to a lack of inventive step. It has substantiated that all the additional measures in the subclaims of claim 1 are already known from Uniclic/Uniloc panels which Unilin disclosed in the Batibouw documents. Furthermore, 14F argues that the method claims are also neither novel nor have inventive step. Unilin argued in this regard that 14F failed to substantiate until the plea hearing that the method claims are invalid as well.

4.30. Unilin's defence fails. Since 14F argued, stating reasons, that and on which ground the subclaims lack inventive step, and given the content of those claims, the District Court is of the opinion that Unilin should have contested, stating reasons, that the additional measures of those subclaims demonstrate that the claim has inventive step, which it failed to do. With regard to the method claims, the District Court rejects Unilin's objection that 14F failed to further substantiate until the pleadings why these are invalid as well. Unilin has neither argued nor proven that and why it was prejudiced in its defence given the fact that the arguments of 14F are similar to or follow on from the invalidity arguments 14F advanced with regard to (the subclaims of) claim 1. Therefore, the District Court considers that claims 2 through 26 also lack inventive step and are therefore invalid.

Auxiliary requests

4.31. The auxiliary request Unilin do not alter this. The four auxiliary requests each consist of a direct combination of the main claim with one or more subclaims, as Unilin explained during the pleadings. What is considered above regarding the subclaims therefore applies to the auxiliary requests as well.

Judicial declaration of non-infringement

4.32. 14F claims a declaration of non-infringement regarding its Click4U technology (see 3.2.5). The District Court partially allows the claimed declaration of non-infringement.

4.33. Insofar as 14F claims a declaration regarding the Dutch part of EP 341, it cannot be understood which interest 14F still has in that claim as the Dutch part of EP 341 will be declared invalid, or 14F has not stated such an interest. For the Dutch part of EP 341 the claimed declaration (primarily and alternatively) is therefore rejected.

4.34. With regard to the foreign parts of EP 341, the judicial declaration that is primarily claimed is not allowable either. The claim concerns the Click4U technology of 14F. 14F has submitted figures of coupling parts according to that technology. Unilin has rightly contested that it can be established based on those figures that no permanent tension force is exerted by the elastic lower lip of the groove in conformity with measure (f) of EP 341. On that basis, the primary claim had to be rejected with regard to the foreign parts of EP 341 as well.

4.35. With regard to the foreign parts of EP 341, the alternatively claimed judicial declaration of non-infringement regarding the Click4U technology which does not contain measure (f) of EP 341 is allowable. Unilin has not explained - subject to applicable foreign law - that there will be no infringement in that case. 14F has an interest in that statement being allowed because Unilin was not willing to confirm during the hearing that there is no infringement of its patent in that case.

Conclusion

4.36. All of this leads to the conclusion that the claim of 14F to revoke the Dutch part of EP 341 will be allowed. The alternatively claimed judicial declaration of non-infringement will be allowed with regard to the foreign parts of EP 341.

4.37. As the party against which the majority of the judgment is rendered, Unilin will be ordered to pay the legal costs on the part of 14F. During the plea hearing, the parties agreed that the party that wins the proceedings will compensate the reasonable and proportionate legal costs the other party actually incurred. 14F assessed its costs at € 295,272. Unilin has not

contested the reasonableness and proportionality of those costs, so that these costs will be allowed.

5. The decision

The District Court

- 5.1. revokes the Dutch part of EP 1 026 341 BI;
- 5.2. rules that the products that are provided with the Click4U technology and which do not contain a measure in conformity with measure (f) of EP 1 026 341 BI do not infringe the foreign parts of this patent;
- 5.3. rejects all other or additional claims.
- 5.4. orders Unilin to pay the legal expenses estimated thus far on the part of 14F at €295,272;
- 5.5. declares the order to pay the costs of the proceedings immediately enforceable;

This judgment was rendered by *meester* E.F. Brinkman, *meester* M.P.M. Loos and *meester* dr. J.H. Kan and was pronounced in open court on 19 October 2016.