

Extraordinary sitting of twenty-seven July two thousand and -deux

Roll number CAL-2019-01184

Composition:

Carole KERSCHEN, President of the Chamber, Danielle POLETTI, First Councillor, Stéphane PISANI, Councillor, Laetitia D'ALESSANDRO, acting clerk.

E n t r e :

1) **TATA STEEL IJMUIDEN B.V. (formerly known as "CORUS STAAL B.V.")**, a company incorporated under Dutch law, established and having its registered office at 1951 JZ Velsen-Noord (Netherlands), Wenckebachstraat 1, registered with the Dutch Chamber of Commerce under number 3404 0331, represented by its Board of Directors currently in office,

2) the Dutch company **TATA STEEL NEDERLAND TECHNOLOGY B.V. (formerly known as "CORUS TECHNOLOGY B.V.")**, established and having its registered office at 1951 JZ Velsen-Noord (Netherlands), Wenckebachstraat 1, registered with the Dutch Chamber of Commerce under number 3408 3341, represented by its Board of Directors currently in office,

3) the English company **CORUS GROUP LIMITED (previously known as "CORUS GROUP PLC")**, established and having its registered office in London (United Kingdom), SW1P 4WY, 30 Millbank, registered with the English Trade and Companies Registry under number 0381 1373, represented by its Board of Directors currently in office,

4) **TATA STEEL UK LIMITED (formerly known as "CORUS UK LIMITED")**, a company incorporated under English law, established and having its registered office in London (United Kingdom), SW1P 4WY, 30 Millbank, registered with the English Companies Registry under number 0228 0000, represented by its Board of Directors currently in office,

5) the Belgian company **SOCIETE EUROPEENNE DE GALVANISATION S.A. (abbreviated to "SEGAL")**, established and having its registered office at 4400 Ivoz-Ramet (Belgium), chaussée de Ramioul 50, registered with the Crossroads Bank for Enterprises under number 0423 596 0525, represented by its Board of Directors currently in office,

appellants by virtue of a writ of the bailiff Geoffrey GALLE of Luxembourg dated 25 October 2019,

Respondents on cross-appeal,

appearing before the Court, represented by Marianne DECKER, lawyer, residing in Luxembourg, assisted by Christophe RONSE and Sophie LENS, lawyers at the Brussels Bar,

and :

ARCELORMITTAL SA, a public limited company, established and having its registered office at L-1160 Luxembourg, 24-26, boulevard d'Avranches, registered in the Luxembourg Trade and Companies Register under the number B 82 454, represented by its Board of Directors currently in office

Respondents for the purposes of the predicate GALLE action of 25 October 2019,

appellant on cross-appeal,

appearing by the limited liability company ARENDT & MEDERNACH, registered on list V of the Luxembourg Bar Association, represented for the purposes of the present proceedings by Astrid WAGNER, lawyer at the Court, residing in Luxembourg, assisted by Fernand de VISSCHER and Philippe CAMPOLINI, lawyers at the Brussels Bar.

LA COUR APPELEE

By judgment of the Tribunal d'arrondissement de and in Luxembourg, sitting in civil matters, dated 17 July 2019, the Dutch company TATA STEEL IJMUIDEN B.V., the Dutch company TATA STEEL NEDERLAND TECHNOLOGY B.V., the English company CORUS GROUP LIMITED, the English company TATA STEEL UK LIMITED and the Belgian company SOCIETE EUROPEENNE DE

GALVANISATION S.A. (these five companies will hereinafter be referred to as the The "TATA STEEL group") were dismissed (i) from their claims relating to joint ownership of the main patent application No. 734 and the divisional patent application No. 581, (ii) from their claims relating to an unlimited right to use the inventions claimed in the main patent application No. 734 and the divisional patent application No. 581 free of charge.

The Court also declared itself incompetent to rule on the validity of the patents which are the subject of the main patent application No. 734 and the divisional patent application No. 581, and declared the claims of the said companies relating to the right to use their knowledge and know-how, respectively to continue to do what they had already been doing since 2002 on the basis of their knowledge and know-how, to be without object.

The court finally dismissed the counterclaim of ARCELORMITTAL (hereinafter ARCELORMITTAL) for damages, and all parties for their claims based on Article 240 of the New Code of Civil Procedure.

In order to rule as it did, the court first set out at great length the facts giving rise to the dispute, to which the Court refers as an integral part of this judgment.

These facts can be summarised as follows: the TATA STEEL group wants to be recognised as co-owner of patent no. 734, claimed by ARCELORMITTAL, on the basis of a report drawn up by Sylvia MEIJERS within the framework of the VRC (Virtual Research Center) research project, more specifically the VRC 0211 project, a centre set up following the signature on 16 May 2000 of an R&D (Research and Development) agreement between the TATA STEEL group and ARCELORMITTAL. The two parties to this agreement were members from 2000 to 2003 of an association under Belgian law called Centre de Recherches Métallurgiques (CRM), whose purpose was to organise collective research into metallurgical manufacturing processes and finished products.

The aim of this research would have been to solve problems related to the galvanising process, especially hot-dip galvanising, in which a metal part is dipped in a bath consisting mainly of zinc and then subjected to a dewatering operation. Following the dewatering, the surface of the sheet would show a gentle geometric irregularity of a fairly large wavelength (0.8 to 10 mm), referred to as "waviness" (WA_{0.8} for short). The paint that is then applied to the sheet should compensate for this waviness to give the part a perfectly smooth appearance. The lower the waviness, the thinner the paint layer needs to be to achieve the same result.

The patent applications filed by ARCELORMITTAL would have the objective of reducing the corrugation below a value of 0.55 microns (μm) by acting on the dewatering operation at the exit of the zinc bath. Two patents are said to be involved, (i) a main patent number 734 and (ii) a divisional patent number 581:

(i) the main patent no. 734

The application for the grant of the said patent relates to "*a process for producing a ZnAl-coated sheet with optimised dewatering, corresponding sheet, part and vehicle*". During the examination phase at the European Patent Office (hereinafter EPO) for the purpose of verifying the legal requirements for the granting of the patent, the patent application was modified and finally consisted of 18 claims. On 24 November 2015, ARCELORMITTAL is informed by letter from the EPO that the latter is considering granting the European patent following the application as amended.

(ii) divisional patent no. 581

This application for a patent relates to "*a process for producing a ZnAl-coated sheet with optimised dewatering, sheet, workpiece and corresponding vehicle*", which is based on 9 claims.

By letter of 10 May 2016, the EPO informed ARCELORMITTAL that, according to its analysis, the divisional patent application did not meet the relevant requirements and asked it to amend its terms.

As for the work carried out within the MRC and the VRC, the court first recalled the existing contradiction between two economic requirements, namely speed and cost: in order for the manufacturing process to be fast and economical, the speed of the sheet metal strip must be as high as possible, but in order to reduce the cost of production, the zinc layer applied must be as thin as possible. However, the higher the continuous strip speed, the thicker the layer of zinc that remains on the sheet after dewatering.

The first objective of the VRC 0211 and VRC 0212 projects was to work on the equation $G=V \times k_1 \times \{1/P \times (2 + D/e)\}k_2$, to identify the limits of the dewatering system in order to achieve a galvanising layer thickness of 4 m on each side of the sheet at a speed of 150 metres per minute and secondly to find solutions to reduce the vibrations to which the sheet is subjected during dewatering, which can have a negative influence on the galvanising layer thickness.

After this technical clarification, the judges of the first instance studied the In the case of the "co-ownership of patents", the principle that "*the*

The right to the patent belongs to the inventor or his successor in title" (Article 60, paragraph 1 of the European Patent Convention (hereinafter EPC); Article 12, paragraph 1 of the Luxembourg law of 20 July 1992 modifying the regime of patents for invention; Article 1, paragraph 1 of the Belgian law of 28 March 1984 on patents for invention) and recalling that the question of conflicts of ownership is currently a matter for national law and national jurisdictions, since the EPC has not put in place mechanisms to deal with these possible conflicts.

The judges noted that the Luxembourg law of 20 July 1992 modifying the system of patents for invention and the Belgian law of 28 March 1984 on patents for invention contain in their articles 14§1 and 9§1 almost identical provisions ("*If a patent has been applied for either for an invention that has been taken away from the inventor or his successors in title, or in violation of a legal or contractual obligation, the injured party may claim his right to obtain the patent*" Luxembourg law).

The judges deduced that the action brought by the TATA STEEL group for the main patent application No. 734 and for the divisional patent application No. 581, only concerns one of the two cases allowing the opening of such an action, i.e. only when the applicant is bound by legal or conventional obligations towards the inventor and has requested the grant of the patent in violation of these obligations.

Before considering these points further, the first instance judges answered two preliminary questions, (i) one on the applicable law and (ii) the other on the ownership of the claim.

(i) the judges held that the question of the status of co-inventor in the case of Sylvia MEIJERS falls under the application of Belgian law

(ii) the judges noted that the TATA STEEL group only claims the status of co-owner and not that of inventor, which would be the responsibility of its employee Sylvia MEIJERS. They held that it is up to the TATA STEEL group to demonstrate that Sylvia MEIJERS participated as a co-inventor in the development of the invention and that if this were the case, only the Dutch company TATA STEEL IJMUIDEN B.V, Sylvia MEIJERS' employer, would have been able to acquire her rights to the invention and would have become a co-owner.

As to the co-ownership of the main patent application No. 734 and the related patent, the court said it understood that the TATA STEEL group was claiming this main patent on the basis of (i) the violation of a legal obligation (Sylvia MEIJERS would have to be qualified as a co-inventor within the meaning of the law) and (ii) the violation of a treaty obligation (ARCELORMITTAL would not have complied with the obligations arising from the treaty framework formed by the MRC and the VRC)

(i) two conditions would have to be demonstrated by the TATA STEEL group, as to the legal obligation:

1- the enjoyment of a co-ownership right in the invention at issue,

2- ARCELORMITTAL's deprivation of this right of co-ownership in breach of a legal obligation.

The parties agreed that the criterion for identifying the co-inventor was verification of a "*substantial contribution*" to the development of the invention, but they disagreed on the characteristics that such a contribution must have in order to be considered substantial. Before applying the general principles to the case at hand, the trial judges explained that this issue must be analysed on a case-by-case basis, that the burden of proof is on the applicant and that the substantiality of the contribution to the invention is measured not by its size, but by its significance, its conceptual value: the greater the conceptual value would be (often going hand in hand with a broad scope of protection), the lower the threshold of substantial value with respect to the claimed invention in order to be considered a "contribution".

This being the case, the court specifically analysed the work carried out by Sylvia MEIJERS in the context of VRC 0211, and concluded that it did not have any particular conceptual character. As a result, the assessment of the substantial nature of her possible contribution must lead to a finding of a high level of contribution, in order to be able to retain that she contributed to the development of the invention. The court deduced from this that any contribution by Sylvia MEIJERS is non-existent.

The Court was keen to point out that (i) the technical problems for which solutions were sought were fundamentally different: reduction of the thickness of the galvanising layer in the VRC 0211 project and reduction of the corrugation of the galvanising layer in the claimed invention. The TATA STEEL group failed to provide evidence of both an intrinsic and obligatory link between the two aspects, namely that an action on the thickness of the galvanising layer would automatically have a positive effect on the degree of corrugation of this galvanising layer, and that the report by Sylvia MEIJERS could have revealed such a relationship. It also (ii) dismissed the developments devoted by the TATA STEEL group to the question of the volume fraction of oxygen represented by the parameter fO_2 , which was part of the equations (respectively inequations) (B) and (D) claimed by ARCELORMITTAL and which was not set out in the report of Sylvia MEIJERS. The court also (iii) referred to the fact that it was not necessary to know whether Sylvia MEIJERS had taken into account the use of different gases with different oxygen volume fractions (air or nitrogen) and whether she had identified the impact of these differences on her work: in fact, her report does not allow her to

The Tribunal found that Sylvia MEIJERS' report did not address the issue of skin-pass and that the developments in this regard were irrelevant to the evidence of the TCI group. The Court stated (iv) that Sylvia MEIJERS' report did not address the issue of skin-pass and that the developments relating to it are unrelated to the evidence to be adduced by the TATA STEEL group, namely that of Sylvia MEIJERS' contribution to the invention claimed by ARCELORMITTAL.

As for the case VRC 0211, the court concluded that in the absence of proof that the work of Sylvia MEIJERS contributed substantially to the development of the invention claimed by ARCELORMITTAL, it was not in violation of the law that ARCELORMITTAL filed the patent application alone.

The court then briefly examined the VRC 0212 project and concluded that it could not find a contribution either from this project as a whole or from the CORUS company, whose rights are held by the TATA STEEL group, in the realisation of the invention claimed by ARCELORMITTAL, so that it was still not in violation of the law that ARCELORMITTAL alone filed the patent application.

Having accepted this, the court turned to the second condition, relating to the breach of a legal obligation. It recalled that in order to win its case, the TATA STEEL group must show that it was bound to ARCELORMITTAL by a contractual relationship that gave it co-ownership of the invention in question and that ARCELORMITTAL deprived it of this co-ownership right by violating a contractual obligation. After listing and repeating the texts and agreements invoked by the TATA STEEL group, the court came to the conclusion that only the internal rules of the MRC deal with the subject by referring to the common law of patent ownership. In view of this finding, it is up to the TATA STEEL group to prove that Sylvia MEIJER, whose rights it holds, has substantially contributed to the realisation of the invention claimed by ARCELORMITTAL. However, this proof was not provided, so that the TATA STEEL group's claim was also rejected insofar as it was based on ARCELORMITTAL's breach of a contractual obligation.

As for the co-ownership claimed in the divisional patent application No. 581 and the related patent, the judges of the first instance considered that, in the absence of any specific developments by the TATA STEEL group on its potential contribution to the invention which is the subject of the divisional application, they admit that the arguments are the same as those for the main patent, so that the judges also rejected this part of the TATA STEEL group's claim.

In view of the absence of a co-ownership right for the benefit of the TATA STEEL group, the same judges did not rule on the question of whether this right amounted to one half or one quarter.

The TATA STEEL group claimed, in addition to the right of co-ownership of the patent, a right of use of the patents and techniques, consisting mainly in wanting to enjoy an unlimited and free right of use of the invention claimed by ARCELORMITTAL, if not subsidiarily to be able to continue to do what he has been doing since 2002, namely *"to use the "G" equation under normal spinning conditions and more particularly to use combinations of values of the parameters making up the "G" equation that satisfy at least one of the inequations claimed by ARCELORMITTAL"*.

After holding that the TATA STEEL group is entitled to base its claims on the VRC Secrecy Agreement dated February 8, 2002, as amended in its "SECRECY6" version, the court then indicated that it is solely up to the TATA STEEL group to prove a link between the collective research to which it contributed and the invention claimed by ARCELORMITTAL. After recalling the findings made earlier in the judgment, the judges of first instance noted *"the absence of any link between the VRC 0211 and VRC 0212 projects on the one hand and the inventions claimed by ARCELORMITTAL, whether it be the main patent application No. 734 or the divisional patent application No. 581, on the other. The TATA STEEL group cannot therefore claim, on the basis of the contractual stipulations binding the parties, an unlimited and free right to use the inventions claimed by ARCELORMITTAL"*. Finally, regarding the right of the TATA STEEL group to continue to do what it has been doing since 2002, the judges of the first instance decided that the parties anticipate the question of the existence of patents, which is within the competence of the EPO, as well as the questions of the validity and scope of the patents, if they were granted, so that these questions *"are in any case, at the present time, irrelevant"*.

The court then came to ARCELORMITTAL's counterclaim, seeking an order that the various entities of the TATA STEEL group pay it jointly and severally, if not *in solidum*, then each for the whole, the sum of EUR 100,000 as compensation for the damage it suffered as a result of the conduct of the TATA STEEL group, which allegedly informed the EPO of the existence of the present action and asked to suspend the procedure for the grant of the patents claimed by it.

The judges recalled the facts (all the proceedings initiated since 10 February 2014), and then the legal framework, to state firstly that this issue must only be analysed from the point of view of the reproach made against the TATA STEEL group for having maintained the suspension measure, by refusing to allow the granting procedure to continue, whereas the initial request consisting in

In the event that the applicant fails to inform the EPO and invoke the application of the suspension measure, it would not be in a causal relationship with the alleged damage.

The court held that the TATA STEEL group had not, by abuse of rights, refused to grant the release of the suspension of the grant procedure, in particular in view of the legal uncertainty in the matter. TATA STEEL was also accused of having voluntarily delayed bringing the action before the Luxembourg District Court, for the sole purpose of delaying the granting of the patents as much as possible: these allegations were not proven, as it had not been shown that the TATA STEEL group was aware of patent application no. 734 before the formal notice of 7 July 2015. The counterclaim was dismissed.

As both parties were partly unsuccessful in the proceedings, the judges of the first instance dismissed both their claims based on Article 240 of the New Code of Civil Procedure.

By bailiff's deed of 25 October 2019, the various entities of the TATA STEEL group, all present at first instance, appealed against the said judgment, which was served on them on 17 September 2019, to have it reformed as follows:

- mainly
 - as to the co-ownership of the claimed invention: to declare that the right to obtain European patent no. 14 706 122.0 belongs in co-ownership to the TATA STEEL group and to ARCELORMITTAL, to order that the company under Dutch law TATA STEEL IJMUIDEN B.V. be mentioned as such in the aforementioned patent application and subsequently in the patent as it may be granted and that the TATA STEEL group be granted co-ownership of any divisional application of the European patent based on this application,
 - as to the right of unlimited and free use of the claimed invention: to say that the TATA STEEL group enjoys such a free and unlimited right (in time and space),
- in the alternative: to take note that the TATA STEEL group reserves the right to request the invalidation of European patent number 14 706 122.0 as granted, as well as of any divisional patent based on said patent,
- in any case

- take note of the fact that TATA STEEL offers to prove the facts related by Michel DUBOIS in its certificates of 9 January 2017 and 12 September 2018 by hearing him,
- order ARCELORMITTAL to pay to the applicants (to be read as appellants), a procedural indemnity of 15,000 euros each, for both the first instance and the appeal, on the basis of Article 240 of the New Code of Civil Procedure, as well as the costs of both instances (distraction Me Marianne DECKER).

The TATA STEEL group, after a very long review of the facts, namely the main patent application EP 734, the divisional patent application EP 581, the collaboration of ARCELORMITTAL and the TATA STEEL group within the MRC and within the VRC, the alleged joint development by the parties of the invention claimed exclusively by ARCELORMITTAL (VRC project 0211 entitled "*Reduced thickness zinc coating at high spinning speed*" and the report written on 19 April 2002 by Sylvia MEIJERS, VRC Project 0212 entitled "*Pre-industrial study of zinc coating/dipping*"), the other proceedings in which the same parties are opposed (in Germany, Luxembourg, in the Netherlands), complains that the judgment under appeal did not hold that the research of Sylvia MEIJERS and her results, which are included in the report of 19 April 2002, undeniably constitute a substantial contribution to the development, by ARCELORMITTAL, of the claimed invention. The TATA STEEL group's request should have been granted, whatever the legal basis considered (subtraction of the TATA STEEL group's contribution or breach of a legal or contractual obligation); its request for recognition of an unlimited and free right of use should have been granted, even though the TATA STEEL group was an effective member of the MRC and the VRC, and thus participated in several collective researches, the results of which undoubtedly contributed to the development,

by ARCELORMITTAL, of the claimed invention and more particularly of the inequalities covered by said invention.

The TATA STEEL group states that the appeal is limited to these two points, noting that the judges of first instance declared themselves incompetent on the question of the right of the TATA STEEL group to use the knowledge and know-how acquired prior to the filing of the patent applications EP 734 and EP 581. The TATA STEEL group reserves the right to take further action in this respect by way of a separate action.

In support of its appeal, TATA STEEL submits in its appeal that

- as to the co-ownership claim

1) The TATA STEEL group refers to Articles 60(1) and 61(1) of the EPC, Articles 12(1) and 14(1) of the Luxembourg law of 20 July 1992 amending the patent regime and Articles XI.9 and XI.10 of the Belgian Code of Economic Law in order to conclude that there are "no challenges" to the judgment under appeal, which subjected the claim action to Luxembourg law and the question of co-inventor status to Belgian law.

2) As for the conditions applicable to the claim action, the TATA STEEL group cites a decision of the Belgian Court of Cassation of 18 November 2016, according to which "*it is not required that the contribution in itself meets all the legal conditions of a patentable invention*" in order to be considered as a co-inventor of the patent, it would thus be sufficient that the contribution is substantial, being of an intellectual and creative nature. The result of the co-inventor's intellectual contribution must be included in the claims of the patent at issue and it is not required that this contribution be of any "conceptual" nature or that the

the "conceptual" level of the contribution may have an impact on the quality of co-inventor.

3) Concerning the co-ownership of the main patent application EP734, the TATA STEEL group specifies that ARCELORMITTAL not only violated its contractual obligations within the MRC and the VRC, namely the internal rules of the MRC, which provide that inventions created in the context of collective research shall in principle belong to the members who carried out the said research, but that it also withdrew several elements disclosed by the TATA STEEL group, in particular in Sylvia MEIJERS' report, which undeniably and substantially contributed to the development of the claimed invention and more particularly of the inequalities covered by said invention. The judges of first instance would have added, wrongly, the term "fraudulent" behind subtraction. The Belgian Court of Cassation, by judgment of 18 November 2016, had already ruled that "*it follows from this provision that the exercise of the rights referred to in §§1 and 2 (art XI.10 and 2CDE) does not require bad faith on the part of the patent holder*". The TATA STEEL group's action would thus be based both on the first case of evasion and on the second of breach of a legal obligation (Article 14(1) of the Luxembourg law of 20 July 1992).

The TATA STEEL group then asserts that the work carried out by Sylvia MEIJERS contributed substantially to the development of the invention claimed by ARCELORMITTAL: it would be important to recall that by succeeding in identifying more precisely the influence of variables, and therefore the value of the factor k_1 that encompasses them, Sylvia MEIJERS replaced an unknown in the equation "G" with a more precise value, making it possible to obtain thousands of combinations of parameter values, which it later appeared satisfied "at least one" of the inequalities claimed and therefore already in 2002 made it possible to obtain a reduced corrugation in accordance with the invention. In short, ARCELORMITTAL "*simply*" discovered that the

combinations of parameter values obtained via the "G" equation, as specified by Sylvia MEIJERS, also made it possible, under normal dewatering conditions, to obtain reduced undulation. ARCELORMITTAL would then have developed the claimed inequations with a view to translating and systematising the results of Sylvia MEIJERS' research and to defining the ranges within which the combinations obtained by applying equation "G" would fall. It would be undeniable that Sylvia MEIJERS made a substantial contribution to the said invention. It should also be remembered that the "G" would be predictive, in contrast to inequations, which would not predict precisely the relationship between the dewatering parameters in order to obtain a given reduced ripple, but only allow the identification of relatively large windows of operations in which this reduced ripple will be obtained.

As for the burden of proof, the TATA STEEL group recognises that it is its own, while arguing that ARCELORMITTAL also has an obligation of loyalty in establishing the proof: it should contribute to this. It should not be forgotten that as early as 2005, ARCELORMITTAL would have presented a coating "Ultragal", with low ripple.

4) Regarding co-ownership of the divisional application of EP 581, the TATA STEEL group deduces from the opinion issued on 29 April 2016 by the EPO, namely that "*independent claim 1 of the divisional application EP 581 is not limited by the (in)equations claimed in the main application EP734 and the corresponding reduced undulation, the EPO held that the divisional application under consideration does not meet the requirements of Article 76(1) EPC, in that the subject matter of claim 1 has no basis in the earlier application and its subject matter extends well beyond the contents of the earlier application*", that it should be recognised as a joint owner of the divisional application, and possibly of the resulting patent, since it would be established that the elements set out in EP734 would result from

research conducted and funded jointly by the parties during their collaboration in the RCV.

In any event, the TATA STEEL group mainly claims co-ownership of the patents in the name of its group and not only in the name of TATA STEEL IJMUIDEN BV, Sylvia MEIJERS' employer, whereas the work carried out by Sylvia MEIJERS would have been carried out within the VRC, on behalf of the TATA STEEL group as a whole. In the alternative, if Sylvia MEIJERS is a co-inventor, the TATA STEEL group claims to be an equal co-owner with ARCELORMITTAL.

- as to the right of unlimited and free use

On the basis of the collaboration within the MRC and the VRC, the parties would have decided to share the fruits of this collaboration by granting each other a free and unlimited right to use all the results resulting from it (point 2.3 of the MRC's internal rules and regulations and the confidentiality agreement concluded within the VRC). The TATA STEEL group claims to have contributed to the claimed invention, that ARCELORMITTAL did not create the concept of reduced corrugation, nor even a specific process to obtain it, that ARCELORMITTAL simply discovered the usefulness of the additional function presented by the work of Sylvia MEIJERS, as regards the corrugation of the coating. There would still be grounds for reformation on this point.

The TATA STEEL group finally claims a procedural indemnity of 15.000.- Euros each time, for both instances, on the basis of article 240 of the New Code of Civil Procedure.

The investigation was closed by order of 8 June 2021.

In accordance with Article 1 of the Act of 19 December 2020 on the extension of measures before the courts subject to civil procedure, the parties' representatives were informed in writing on 9 June 2021 of the hearing to be held on 9 December 2021.

The parties' agents having informed the Court that they intended to plead the case, a hearing was scheduled for 19 January 2022 and then rescheduled for 3 February 2022.

By notice of 13 January 2022, the parties' agents were informed of the hearing and the composition of the Court.

For medical reasons, the case underwent refixations and it was finally at the hearing of 24 March 2022, that it was pleaded and taken under advisement by the announced composition.

Discussion

Each party having filed summary submissions, only the latter will be taken into account by the Court, by application of Article 586 paragraph 2 of the New Code of Civil Procedure, namely, for the TATA STEEL group, those filed at the Court Registry on 14 April 2021 and for ARCELORMITTAL those filed on 15 April 2021.

With regard to the main appeal, **ARCELORMITTAL** refers to judicial caution as to the admissibility of the appeal in pure form.

As a principal claim, it seeks to have this appeal declared unfounded, to dismiss the TATA STEEL group's claims and to confirm the judgment a quo, while adding the following to the operative part of the judgment: "and to declare that the respondent in the main proceedings has neither withdrawn from the appellants in the main proceedings the inventions which are the subject of the contested patent applications (the main application No. EP 14 706 122.0 published on 19 August 2015 under No. EP 2 906 734, on the one hand, and divisional application No EP 16 161 736.0 published 17 August 2016 under EP 3 056 581, on the other hand), nor filed the said patent applications in breach of any legal or contractual obligation to the appellants in the main proceedings.

In the alternative, ARCELORMITTAL requests that the appellants' claim for alleged co-ownership of the invention in question be declared unfounded insofar as it relates to an appellant other than TATA STEEL IJMUIDEN BV and that, in any event, the TATA STEEL group's share of the main patent application and of any divisional patent application based on this main patent application cannot be greater than one quarter, irrespective of the appellant companies.

In the alternative, as regards the appellants' claim to an alleged right to use the invention made by ARCELORMITTAL, in the event that such a right is recognised to the TATA STEEL group due to a collaboration

ARCELORMITTAL requests to limit this right of use to the results of the VRC0211 project only (8 data combinations at the bottom of page "3" of the report of Sylvia MEIJERS, the value determined by her for the constant "k" in the equation "G"-between 12.4 and 14.1-, if "G" were to be considered as a result of the VRC0211 project, then only as an equation for deducing the thickness of the sheet coating from a number of other parameters), to the express exclusion of the inventions at issue, in particular the equations described and claimed in the main patent application, and to limit this right of use to the production of metal sheets with a zinc coating of 70 g/m² thickness at a running speed of 150 metres per minute

In the alternative, with regard to the appellants' request concerning an alleged right to use the invention in question, in the event that such a right is recognised to the TATA STEEL group due to the collaboration of the parties in the framework of the project that led to the presentation "Improved stability of strip during wiping in HDG lines", invoked by the TATA STEEL group, ARCELORMITTAL requests the limitation of this right to the use of sheets presenting, after skin-pass, the corrugations indicated on page "7" of the said presentation, with the express exclusion of the inventions described and claimed in the litigious patent applications or any other divisional applications grafted onto them.

As regards the cross-appeal, ARCELORMITTAL requests that it be granted its request to order the TATA STEEL group to pay the sum of 100,000.- 100,000, to which it provisionally assesses its loss suffered because of the suspension, at the request of the second appellant, of the granting of the two contested European patents by the EPO, to declare that this claim is well-founded and justified, and to order the appellants jointly and severally, if not *jointly and severally*, if not each for the whole, if not each for its share, to pay it the said sum, with legal interest for delay.

ARCELORMITTAL also requests that the TATA STEEL group be ordered to pay the costs of both proceedings, as well as procedural damages of 15,000 euros for each of the proceedings, on the basis of Article 240 of the New Code of Civil Procedure.

To conclude in this sense, ARCELORMITTAL starts with a summary, then gives its version of the facts and procedural history, to insist that the TATA STEEL group has, from the outset, introduced the present proceedings with the aim of creating an artificial obstacle to the granting of the European patent, which the EPO was about to grant, in order to delay the moment when it could assert its exclusive rights on the process and products claimed in the contested patent applications against the TATA STEEL group and any other third party.

ARCELORMITTAL points out that the notice of appeal of 25 October 2019 constitutes a partial appeal, insofar as the TATA STEEL group did not appeal against the part of the operative part of the judgment under appeal which declared the claims of the TATA STEEL group "*relating to the right to use their knowledge and know-how, respectively to continue to do what they had already been doing since 2002 on the basis of their knowledge and know-how*" to be devoid of object.

ARCELORMITTAL then returned to the patent claims at issue, as explained in the first instance, before developing at length its legal arguments, subdivided into three main groups, in relation to the main appeal. These pleas are summarised as follows:

- 1) as to the TATA STEEL group's appeal for a reversal of the judgment insofar as it dismissed its claim for recognition of a right of co-ownership.

ARCELORMITTAL considers this appeal unfounded: as a preliminary point, it should be noted that the TATA STEEL group does not raise any grievance against the judgment *a quo*, other than that of not having found in its favour, without bringing the slightest new element in relation to the first instance, except to criticise the use on page "12" of the judgment of the term "*inventive contribution*" instead of "*substantial contribution*": this distinction would have no impact whatsoever, whereas the judges of first instance would have held that none of the criteria would be met. The confused and inconsistent position of the TATA STEEL group should also be highlighted: from claiming at the outset to have developed the "G" equation, it should have admitted that Sylvia MEIJERS had merely taken this equation from previous work, without knowing the name of its author. As for the eight combinations of data that the TATA STEEL group emphasised, it finally admitted that these eight combinations reproduced in the MEIJERS report were nothing more than the first eight of the eight thousand combinations of parameters found by Sylvia MEIJERS. Similarly, it would be obvious that the TATA STEEL group would find it very difficult to clearly define in what way Sylvia MEIJERS would have contributed to the invention made by ARCELORMITTAL. It would indeed be mathematically impossible to arrive at ARCELORMITTAL's inequalities by starting from the combinations of data that satisfy the "G" equation, since some of the said combinations of data do not satisfy the said inequalities. Moreover, prior to the present litigation, no one had ever established any connection between these combinations and the technical problem of corrugation reduction. The TATA STEEL group is quite wrong in asserting that the process described by Sylvia MEIJERS and the one described in the patent application are identical: it is a matter of controlling the dewatering phase by the very precise control of various parameters in order to obtain a reduced corrugation: this new and inventive character was retained by

the EPO, by closing the substantive examination of the main patent application with the notification of the text on which the EPO intended to grant the patent, in accordance with Article 71(3) of the EPC. ARCELORMITTAL stated that it would be logical for the parameters to be present in both processes, as these are parameters physically present in any galvanised sheet production line. Its merit would not be to have identified these parameters, but to have precisely defined the way in which they must be related to each other, via inequalities absent from the Sylvia MEIJERS report, and with another parameter, fO_2 (the volume fraction of oxygen), not identified by Sylvia MEIJERS, with the precise aim of reducing the corrugation of the sheet coating, an aim totally absent from the MEIJERS report.

The TATA STEEL group would base its thesis on approximations and untruths:

- a) it would be wrong to say that the eight combinations of data on the
The MEIJERS "3" report would satisfy both the "G" equation and the ARCELORMITTAL inequalities: it would satisfy almost none of the inequalities, and not even the "G" equation,
- b) it would not be correct to say that Sylvia MEIJERS would have selected the eight combinations of data, which would be purely exemplary, to calculate the constant "k1" in the context of the production line "DLV1",
- c) the "G" equation, which determines the coating weight "G", would not have been developed by Sylvia MEIJERS,
- d) As the "G" equation was known before Sylvia MEIJERS' work, so was the fact that the parameters P, D e and V have an influence on the weight of the coating: Sylvia MEIJERS did not identify these parameters, nor their combination, as being particularly important for undulation, the latter being outside her considerations,
- e) it would be inaccurate to say that the TATA STEEL group has identified all the parameters identified in ARCELORMITTAL's invention, since the oxygen volume fraction (fO_2) does not appear in it, even though it is an essential parameter of inequalities (B) and (D).
- f) it would still be wrong to assert that a "vast majority" of the combinations imaginable via the "G" equation would satisfy one or more of the following

In contrast, the "G" equation would give very many results that do not satisfy any of the inequalities. On the contrary, the "G" equation would give very many results that do not satisfy any of the inequalities.

- g) it should be noted that the product "Serica" referred to by ARCELORMITTAL in a letter of formal notice dated 7 July 2015 would not in any way result from work carried out by the TATA STEEL group and ARCELORMITTAL on a completely different subject almost 10 years earlier.

After these preambles on the point of co-ownership, ARCELORMITTAL indicates that the VRC 0211 project (years 2000 to 2004) and in particular the MEIJERS report of 19 April 2002, would not contain any contribution to the invention made by ARCELORMITTAL, whereas it aimed to solve a technical problem different from that solved by the invention in question. For the VRC 0211 project, the aim was to achieve the lowest possible coating weight while maintaining the highest possible speed. Contrary to the current claims of the TATA STEEL group, there was never any question of "systematically identifying the normal spinning conditions for sheet metal intended for the manufacture of car body parts". The VRC 0211 project would not have been concerned at any time with coating waviness, but to identify at an industrial level the effects of zinc bath temperatures, type of zinc, type of gas (air or nitrogen) and its temperature, substrate roughness and injector opening, all with a view to achieving as thin a coating as possible. The TATA STEEL group has not provided any evidence or even demonstrated an intrinsic link between the two aspects in that an action on the thickness of the galvanising layer would automatically have a beneficial effect on its degree of corrugation, nor has the MEIJERS report revealed such a relationship. This alone would be sufficient to reject the main claim of the TATA STEEL group.

ARCELORMITTAL then pointed out that the MEIJERS report had not been communicated to it and that it could not have contributed to the development of its invention: any proof in this sense would be lacking. The TATA STEEL group's reproach that ARCELORMITTAL would not collaborate loyally in the burden of proof is unfounded. As for the testimonial attestation of Michel DUBOIS of 9 January 2017, a former ARCELORMITTAL employee and coordinator of the VRC 0211 project, it would have been established providentially fifteen years after the facts, contradicting no less than four documents established at the time of the facts. The second testimonial attestation of Michel DUBOIS, dated 12 September 2018, would not be credible, whereas all the summary reports and other documents would have systematically indicated that no document would have been received from CORUS, Sylvia MEIJERS' employer. This assertion is further contradicted by the

mail from Michel DUBOIS to Christian MARIQUE dated 19 March 2004, and by the latter's attestation of 14 September 2017. Michel DUBOIS's second attestation could at most establish that he had received the MEIJERS report at the time, but had not passed it on to the CRM or to any other person.

Even supposing that this MEIJERS report had been transmitted to ARCELORMITTAL, it would not contain any element that could have contributed to the invention in question in the patent applications before us. Sylvia MEIJERS would have been satisfied with verifying the validity of the "G" equation by comparing it with the measurements she made on the production line "DVL1". To do this, she would have tried to approach as precisely as possible the value of the constant "k1", which was previously known to be close to "13". Sylvia MEIJERS concludes that "k1" can vary between 12.4 and 14.1, which means that Sylvia MEIJERS has not specified the value of "k1". Moreover, the values validated in this way were of no interest outside the specific context of the "DVL1" galvanising line belonging to TATA STEEL. Finally, this constant "k1" does not appear anywhere in the inequations developed by ARCELORMITTAL.

In seeking in vain to establish the existence of a contribution of the MEIJERS report to ARCELORMITTAL's invention, the TATA STEEL group would erroneously assert that the two findings of the said report (reducing the thickness of the sheet coating at a high speed) would be transposable to the technical problem resolved by the invention. This is because the "G" equation is descriptive and not intended to solve any particular problem, let alone the problem of corrugation.

To support its allegations, the TATA STEEL group added several graphs to its conclusions, which call for the following comments: these graphs are an artificial construction made a posteriori by the TATA STEEL group, without any link to the VRC 0211 project: they should be excluded from the discussion. In any case, even if these graphs were to reflect the work carried out within the VRC 0211 project, they would not establish any contribution of the TATA STEEL group to the invention of ARCELORMITTAL (these graphs do not illustrate the work carried out within the VRC working group and were never advocated or discussed by Sylvia MEIJERS, they are mathematically false - allowing the TATA STEEL group to reinvent a posteriori the "lessons of Sylvia MEIJERS' work" via manipulations - and they are inconsistent with the aim of the VRC project - the orientation of certain vectors towards the North-West necessarily representing a decrease in speed, with a constant coating weight - and they are detached from any basis or technical reality).

The TATA STEEL group would be unaware of the fundamentally different nature of the "G" equation compared to ARCELORMITTAL's inequations. The first

being "descriptive" (it estimates the thickness of the coating within the framework of a model), while the others are "prescriptive" (they prescribe, in order to achieve a reduced corrugation, the implementation of certain combinations of specific parameter values). ARCELORMITTAL's invention is in no way a generalisation or systematisation of Sylvia MEIJERS' work: the "G" equation is always realised and necessarily covers a wider set of combinations than ARCELORMITTAL's inequations.

The MEIJERS report does not disclose or suggest the inequation (A) developed by ARCELORMITTAL, on the contrary: at least two of the eight data combinations do not satisfy inequation (A). It would therefore have been impossible to arrive at this inequation using Sylvia MEIJERS' eight combinations. Furthermore, this report would not suggest at any point that it would be possible or useful to group these data under a specific formula or equation in order to solve a problem related to the quality of the product obtained.

The MEIJERS report would neither disclose nor suggest inequation (B), nor the usefulness of the parameter f_{O_2} , on the contrary, this inequation would not be satisfied by any of the eight combinations of data presented on page "3" of the report, because the spin gas used was air and not nitrogen. Sylvia MEIJERS used air in her experiments and concludes that the nature of the gas has no influence on the determination of the constant "k1" in the "G" equation. However, for ARCELORMITTAL's invention, the nature of the dewatering gas does have an influence on the verification of the inequations developed by it.

It should be noted that the MEIJERS report would not specify the weight content of aluminium in the coating when the data relied on by the TATA STEEL group was obtained, whereas the first claim of ARCELORMITTAL's main patent application would require the metal coating to have an aluminium content of between 0.2 and 0.7% by weight. For the coating used by Sylvia MEIJERS, this content would not be known, at least until 17 April 2002: the data in the table on page

The "3" of the MEIJERS report would have been noted on 15 April 2002; this would have been data for different sheets. Thus, this report would not contain any contribution to the invention made by ARCELORMITTAL, in the absence of having perceived the role of the weight content of aluminium in the coating.

ARCELORMITTAL further states that the MEIJERS Report would not further disclose, or even suggest, the equations (C) and (D) developed by it, on the contrary, the TATA STEEL group would admit that neither of these data sets would satisfy equation "G". Equation (D) would only be satisfied if the dewatering gas used by Sylvia MEIJERS (air) were substituted by the oxygen volume fraction of a different gas (nitrogen). But this premise would not have existed in Sylvia MEIJERS' tests. It would require

conclude that the data in the MEIJERS report, especially the eight on page "3", cannot be considered, on any grounds whatsoever, as a contribution, a fortiori as a substantial and creative contribution to the invention made by ARCELORMITTAL.

As for Exhibit IV.2bis submitted by the TATA STEEL group, it is important to note that it contains two groups of complementary data which do not result from any real test, but which were imagined by the TATA STEEL group. The objective would be to demonstrate that, from imaginary data, results are often obtained that would satisfy inequalities (A), (B), (C) and/or (D). However, these examples are absent from the MEIJERS report and, moreover, the method followed by the TATA STEEL group would not be reliable: it would even have devised a final argument, by resorting to "*normal spinning conditions*", which it defines as "*spinning conditions for a sheet intended for the manufacture of bodywork parts meeting the objective pursued by the VRC0211 project*", i.e. yet another imprecise notion constructed a posteriori, for the needs of the case. ARCELORMITTAL demonstrates, with mathematical reasoning, that the TATA STEEL group's argument is unfounded and even contrary to the documents in its own file. It would therefore be incorrect to say that compliance with the "G" equation combined with a "normal" SM ratio (ratio between the thickness of the coating and the speed of travel) would necessarily lead to compliance with ARCELORMITTAL's inequalities. There would not even be a correlation between this SM ratio and reduced corrugation. ARCELORMITTAL concludes "*if the implementation of the "G" equation really did lead automatically, as a kind of unexpected and providential "bonus" effect, to plates with reduced corrugation, it is not credible that Mrs MEIJERS would not have noticed this at the time of her work*". In fact, ARCELORMITTAL could not have used Sylvia MEIJERS' "results" to develop its invention, since she would not have been able to arrive at her inequalities, or even at any of them.

ARCELORMITTAL then insists on the fact that the groups of data isolated by Sylvia MEIJERS were in fact purely exemplary, without being the result of a particular selection: these data would not even all satisfy the "G" equation! These groups would not be the result of an innovative, let alone inventive, selection.

ARCELORMITTAL also emphasises the absence of any "intrinsic link" between the thickness and the corrugation of the zinc coating. There is still no evidence that a reduction in coating thickness automatically reduces corrugation.

It should be borne in mind that none of the documents submitted by the TATA STEEL group, either in isolation or in relation to others, would establish the slightest trace of any contribution by Sylvia MEIJERS to the invention of ARCELORMITTAL: these documents would not suggest either the technical problem

It would have been mathematically impossible to derive these inequalities from Sylvia MEIJERS' combinations. It would have been mathematically impossible to derive these inequalities from Sylvia MEIJERS' combinations, since none of them would satisfy each of ARCELORMITTAL's inequalities. TATA STEEL's claim should be dismissed.

As for the divisional patent application, ARCELORMITTAL notes that the TATA STEEL group does not indicate in what way one of its employees contributed to the invention that is the subject of this patent application; indeed, it did not devote any specific development to its potential contribution to said invention.

In the very alternative, and if the judgment under appeal were to be reversed, ARCELORMITTAL requests that the opposing claim be declared founded only with regard to TATA STEEL IJMUIDEN BV and not to the other members of the group, in view of the fact that Sylvia MEIJERS only assigned her intellectual property rights to her employer, i.e. TATA STEEL IJMUIDEN. The fact that the work within the VRC was to benefit all the companies involved would not mean that the patents resulting from this work were necessarily to be co-owned by each of the many companies in each of these groups.

In the same vein, assuming that Sylvia MEIJERS is recognised as a co-inventor, the co-ownership share of the TATA STEEL group in the main and/or divisional patent application should be limited to one quarter, since Sylvia MEIJERS would have been only one out of four inventors, irrespective of whether this share would be recognised solely to TATA STEEL IJMUIDEN BV.

- 2) as to the TATA STEEL group's appeal for a reversal of the judgment insofar as it dismissed its claim for an unlimited and free right to use the ARCELORMITTAL invention.

The TATA STEEL group bases this head of its claim on the VRC 0211 project and relies entirely on the contractual framework put in place at the time of the collaboration in the early 2000s and in particular on a confidentiality agreement that was concluded. This would be the "VRC Secrecy Agreement", which would never have been finalised or signed. This document is said to be a draft agreement, as evidenced by the e-mails of 15 and 16 January 2002, a memo of 6 February 2002 and e-mails of 8 February 2002: the document exchanged on that day is said to be a simple draft summary report and, as wrongly held by the trial judges, a '*summary report*'. As for the minutes of the Steel Committee meeting of 13 February 2002, they only confirm that discussions were underway, in particular on the scope of a possible right of use. Even if there had been agreements on

certain principles, the contract on which the parties were discussing still had to be drafted.

In the alternative, assuming that an agreement had been reached, quod non, ARCELORMITTAL concludes that no unlimited right of use for the benefit of the TATA STEEL group would result from it: firstly, it would be inaccurate to say that this "VRC Secrecy Agreement" would refer to Article 2.3 of the internal regulations and secondly, such a use could only concern the results of the research carried out within the VRC: as the research within the framework of the VRC 0211 and VRC 0212 research would not have led to any results, this research would have been abandoned and would not have led to the filing of any patent.

On an infinitely more subsidiary basis, if a right of use were to be granted to the TATA STEEL group on the basis of this confidentiality agreement, it could not have the scope requested: this right should be limited solely to the results generated within the framework of the VRC 0211 project, i.e. to the MEIJERS report, to the exclusion of any use of the invention that ARCELORMITTAL would have allegedly deduced from it subsequently, which would necessarily be subsequent to the results of the VRC 0211 project. Moreover, this right of use should be limited solely to the production of metal sheets with a zinc coating of 70 g/m² at a speed of 150 m/minute.

The TATA STEEL group would have based its application on the project that led to the presentation "Improved stability of strip during wiping in HDG lines" in April 2005: ARCELORMITTAL points out that here again its invention would not have been made during the research period, but later, and in another technical framework.

In the alternative, if a right of use were to be granted on the basis of this presentation, it would have to be limited to the use of sheets showing after skin-pass the corrugations indicated on page "7" of the presentation to the express exclusion of the inventions described in the patent applications in question.

After analysing the claims of the TATA STEEL group, ARCELORMITTAL cross-appeals, in that the judgment a quo did not grant its claim for damages for the loss suffered as a result of the suspension of the grant of the two European patents at issue by the EPO, at the request of the second appellant. This behaviour would be wrong in three respects:

- under Article 14(1) of the Implementing Regulations of the EPC, the TATA STEEL group had the possibility of informing the EPO of the existence of the present proceedings, but it could have consented to the continuation of the patent granting procedures, which it did not do from the outset, either in its position paper of 30 September 2016 or in its request for oral proceedings

following the EPO's notification of 11 September 2019. The TATA STEEL group would be at fault and it would be inaccurate to say that the causal link had been broken by the EPO,

- the fivefold wrongfulness of the TATA STEEL group's behaviour:
 - Article 61(1) of the EPC would be invoked inappropriately, because it would apply only to cases where a third party claims full ownership of a patent application and not, as in the present case, a right of co-ownership. The TATA STEEL group wrongly alleges that the EPO's Legal Division has formally taken the position that the present proceedings constitute proceedings within the meaning of the above-mentioned article: even if the Court is not bound by such a decision, this decision must be taken in order to prove the causal link with the alleged damage.
 - the TATA STEEL group would misuse Article 61(1) of the EPC and Article 14(1) of its Implementing Regulations and would therefore have no interest in availing itself of them: the function of these provisions would be to preserve the potential rights of third parties who have initiated national proceedings to obtain recognition of a right to obtain the patent concerned. In the present case, there would be no risk of ARCELORMITTAL withdrawing or abandoning its application, nor of it encumbering the contested patent applications with rights granting licences to third parties, without the consent of the TATA STEEL group. There is therefore no justification for the suspension of the patent granting procedures. It would be wrong, after all, that after the grant of a European patent, a claim should be brought individually in each of the countries covered by that patent. The only interest pursued by the TATA STEEL group would be to delay as much as possible the obtaining of exclusive rights by its competitor, ARCELORMITTAL, by exploiting legal provisions which were not adopted for this purpose. This abuse of rights would be even more obvious after the judgment a quo was delivered: by letter of 20 November 2019, the TATA STEEL group would have replied that it wanted to be heard and to maintain its opposition to any resumption of the granting procedures: its real objective would be to delay these procedures.
 - the TATA STEEL group voluntarily delayed bringing the present proceedings: it would be unlikely that ARCELORMITTAL's international patent application (PCT) went unnoticed by the TATA STEEL group when it was published on 12 September 2014. By the time of ARCELORMITTAL's formal notice of 7 July 2015 at the latest, the TATA STEEL group was aware of the existence of this patent application. It waited until 29 April 2016 to bring the present proceedings. Everything was done to act at the latest.
 - the behaviour of the TATA STEEL group would be wrongful in view of the lack of chance of success in bringing the present action, at least in the appeal proceedings: indeed, it would have been dismissed in the first instance because of the absence of any link between the R&D projects and the inventions

of ARCELORMITTAL. This would confirm the totally artificial character of the thesis imagined by the TATA STEEL group, whose malicious behaviour, with the sole objective of causing as much damage as possible to its competitor, should be sanctioned.

- the conduct of the TATA STEEL group was also at fault for having sought to prolong the proceedings at first instance as long as possible: it took six successive sets of pleadings, changing its position on central aspects of the dispute, positions which often contradicted its own documents.

It follows from all these reasons that the TATA STEEL group should be ordered to compensate ARCELORMITTAL for its damage, the existence of which is not in doubt, since it would be limited in its ability to negotiate licences and therefore to collect royalties and it would not be able to take action against those who illegally apply its invention. The extent of this damage would be significant and would in any case not be less than 100,000 euros, an amount claimed provisionally, subject to the final assessment.

ARCELORMITTAL concludes by requesting that the judgment be reversed insofar as it did not grant its request for procedural damages and insofar as it ordered it to pay half the costs of the first instance.

For the appeal proceedings, ARCELORMITTAL requests a procedural indemnity, based on article 240 of the New Code of Civil Procedure, in the amount of 15,000 euros, as well as an order that the TATA STEEL group pay the costs of these proceedings.

The **TATA STEEL group** took position in its summary submissions filed on 14 April 2021 at the Court Registry, repeating many of its arguments and its account of the facts as previously developed, while adding graphs. In summary, it states that the main invention claimed by ARCELORMITTAL would require the satisfaction of at least one of the inequalities (A) and/or (B): the TATA STEEL group concludes that it would be sufficient for it to establish its contribution with regard to this inequality (A), and this mainly on the basis of the research carried out in 2002 within the framework of the VRC 0211 project, summarised in a report dated 19 April 2002. This research was aimed at identifying in a more systematic way the "*normal spinning conditions*" of a sheet intended for the manufacture of bodywork parts. Sylvia MEIJERS is said to have carried out more than 7,000 combinations of spinning parameter values, among which she identified at least 5,507 combinations that would have enabled her to verify the "G" equation. She demonstrated that to reduce the

In order to achieve a high weight (thickness) of metal coating while maintaining a high speed, the distance between the sheet and the dewatering nozzle outlet had to be reduced and/or the pressure of the dewatering gas had to be increased.

The TATA STEEL group then produced a graph "No. 3", from which it concluded that *"although Dr. Meijers' work did not a priori address the issue of corrugation of the outer surface of the sheet metal coating, the thousands of combinations identified in his work (and/or that could be obtained by applying the lessons learnt from that work) would allow a corrugation of less than or equal to 0.55 m to be achieved"*.

In the following graph, "No. 4", the TATA STEEL group explains that under normal dewatering conditions, *"the combinations of dewatering parameter values that allow a reduced coating weight to be obtained at high speed (= aim of the VRC 0211 project) also make it possible to obtain a reduced corrugation of less than or equal to 0.55 m (= object of the invention)"*. There is therefore an intrinsic link between the weight of the coating and the corrugation of the coating. He concludes that ARCELORMITTAL carefully examined the results of the VRC project and then "simply" developed inequalities to define windows of values within which the combinations of values of dewatering parameters that would allow a reduced corrugation to be obtained are located. He thus considers it established that *"his work carried out within the VRC 0211 project would not only have (substantially) contributed to the claimed invention, but would in fact have served as the basis for the said invention"*. His claims in the context of the present litigation would be said to be well founded.

The TATA STEEL group contests ARCELORMITTAL's counterclaim for damages in the amount of 100,000 euros. No fault has been established, nor any damage, nor any causal link between a fault and the alleged damage.

In its legal developments, the TATA STEEL group makes some clarifications, or even additions, in particular concerning the assessment of the quality of co-inventor: according to it, the co-inventor should not necessarily be aware of contributing to a specific invention: his contribution should not be "inventive", but to be substantial, it should be proven that it is of an "intellectual and creative" nature, and the size or magnitude of the contribution would not matter.

The TATA STEEL group reiterates that it claims co-ownership of the patent in question in both possible scenarios:

- ARCELORMITTAL's breach of its contractual obligations: he refers to the texts drawn up in the framework of the CRM and the VRC, as well as to Sylvia MEIJERS' employment contract and the "Confidentiality Agreement",

- the subtraction of the intellectual and creative results generated by the TATA STEEL group in the context of collective research within the VRC, a case which was wrongly not analysed by the court.

As for the communication of the Sylvia MEIJERS report to ARCELORMITTAL, the TATA STEEL group expressly refers to the testimonial attestations of Michel DUBOIS, a former Cockerill/Usinor employee, currently taken over by ARCELORMITTAL, to conclude that this report was effectively communicated to the participants in the VRC 0211 project, including ARCELORMITTAL, and that there is no contradiction between these attestations and the e-mail of 19 March 2004 and the reports of 6 June 2002, 6 January and 30 September 2003, all drawn up by Michel DUBOIS at the time of the facts. This fact is not supported by Christian MARIQUE's e-mail of 4 July 2002 and the latter's attestation of 14 September 2017, nor by the PowerPoint presentation made on 3 July 2002 in Liège.

The TATA STEEL group also denies ARCELORMITTAL's conclusions to the effect that Sylvia MEIJERS' report does not contain any element that could have contributed to the invention claimed in the patent application. It would be "*obvious*" that the latter's work contributed to the invention, in that it would have shown ARCELORMITTAL the direction to follow, which would only have had to develop the inequalities enabling it to systematically reach the direction thus indicated. The TATA STEEL group admits that it inserted the graphs in its submissions to the appeal court, i.e. "*a posteriori*", in order to illustrate and support its "*argument in the present proceedings*". His graph "n° 1" would only illustrate ARCELORMITTAL's invention, his graph "n° 2" would certainly represent the "G" equation used by Sylvia MEIJERS on a two-dimensional graph. This would have been made possible by choosing to represent only one line per determined "G" weight, her graph "n° 4" would prove that Sylvia MEIJERS' work would not have been limited to stating the obvious and that the lessons learned from this work would have undeniably contributed to the development of the invention claimed by ARCELORMITTAL: this equation is not only descriptive, but following the work of Sylvia MEIJERS, it is even predictive of the relationship that must be observed between the dewatering parameters to obtain a given weight at a given speed. On the other hand, the inequations would not make it possible to predict with precision the relationship that the dewatering parameters must maintain in order to obtain a determined reduced undulation.

The TATA STEEL group insists that neither in the VRC 0211 project nor in ARCELORMITTAL's patent application would the nature of the dewatering gas used have any influence. The only difference that could result from

the use of one gas rather than another would lie in the fact that the inequality (B) would be more easily satisfied with nitrogen than with air, because of its lower volume fraction: a combination of parameters with a positive value will always be greater than zero:

$$fO_2 < \frac{2,304 \cdot 10^{-3}}{27.52 + d + 8 \ln(P(d)^{2,25})}^2$$

The TATA STEEL group disputes that the weight content of aluminium in the coating of the resulting sheets can affect the level of corrugation, contrary to ARCELORMITTAL's assertions, nor that the percentage of aluminium contributes to the claimed invention.

As for ARCELORMITTAL's exhibit "G3 of its inventory of 14 October 2020", the TATA STEEL group replies that the results in this table of 27,526 combinations are based solely on parameter values that do not correspond to values used under normal spinning conditions. It insists that the parameter The "SM" would not be artificial, nor would the limit value chosen by it be +/- 68.

Regarding its Exhibit IV.6, the TATA STEEL group concludes that there is no effect of the skin-pass phase on the level of liner ripple.

It would also be irrelevant if Sylvia MEIJERS had carried out her tests on sheets present on the DVL 1 production line of CORUS, whereas any hot-dip galvanisation process would consist of the same steps and involve the same parameters.

Finally, the TATA STEEL group denies that ARCELORMITTAL alone made the claimed invention, ten years after the parties' collaboration within the VRC: as early as 2005, ARCELORMITTAL would have presented to the public two products (Ultragal® and Extragal®) whose degrees of corrugation (< at 0.35 µm, respectively at 0.50µm) would have already corresponded to the reduced level of corrugation referred to in independent claim no. 1 of the EP 734 patent application

After this intensive examination on the question of co-ownership of the EP 734 patent application, the TATA STEEL group comes much more quickly to the question of co-ownership of the divisional application EP 581: it invokes exactly the same reasons as those for co-ownership of the main patent. Indeed, if ARCELORMITTAL wanted to maintain this divisional application, following its rejection by the EPO, it would necessarily have to include in independent claim No. 1 the inequalities (A) and (B) and the correlative reduced corrugation: there would be nothing hypothetical about this future event.

The TATA STEEL group reiterates its request to obtain an unlimited and free right to use the claimed invention and, if applicable, the patent as it will be granted. It returns in greater detail to the "confidentiality agreement", which has not been signed, but it is undoubtedly true that the parties have reached an agreement on the general principles: the statements made to Mr BOOM, former director responsible for research and development within the CORUS group, confirm this. He vehemently contests that the only results to be taken into account and on which he could exercise a right of use would be those of having identified 8 combinations of parameter values and of having made use of the "G" equation for the production of a 4-micron zinc coating on each side of the substrate at a speed of 150 metres per minute.

As for ARCELORMITTAL's cross-appeal, the TATA STEEL group denies having requested the suspension of the grant procedure before the EPO: the suspension would be automatic as soon as the EPO was informed of the existence of a procedure aimed at obtaining a decision within the meaning of Article 61(1) EPC. He considers "ARCELORMITTAL did not prove the absence of a legitimate interest and therefore of abuse of rights by the TATA STEEL group.

On the contrary, the TATA STEEL group argues that it should have brought the present proceedings before the actual grant of the EP 734 patent, otherwise it would have been obliged to bring several co-ownership claims before several national courts or have to obtain recognition of a judgment obtained in one State for enforcement in the other States designated by the patent concerned. This action will further protect him against the effects of any licenses granted by ARCELORMITTAL on his patent, or from having to defend himself against an infringement action brought by ARCELORMITTAL against him.

The TATA STEEL group finally defends itself against ARCELORMITTAL's argument that it would have no chance of success and that its claim would be abusive. It argues that it has committed no fault and that ARCELORMITTAL has not suffered any damage. In the alternative, he pleads the absence of a causal link between the alleged fault and the alleged damage.

The Court's assessment

Preamble

The Court has before it, primarily, the following;

- as to the co-ownership of the claimed invention and, if applicable, of the patent as it will be granted, (i) the request for a declaration that the right to obtain European patent number 14 706 122.0 belongs in co-ownership to the TATA STEEL group, (ii) consequently, the request for an order that the Dutch company TATA STEEL IJMUIDEN B.V. be mentioned as co-owner of patent application 14 706 122.0 (EP 734) and subsequently in the patent, as it may be granted, (iii) and the request for such co-ownership in any divisional application for a European patent based on EP 734, in particular divisional application number 16 161 736.0 (EP 581).
- as to the right of unlimited and free use of the claimed invention and, if applicable, of the patent as it will be granted, independently of the joint ownership application, of the application having as its purpose to state as a matter of law that the TATA STEEL group enjoys such a right unlimited in time and space of the invention which is the subject of the above mentioned patent applications.

In the alternative, the Court is asked to note that TATA STEEL reserves the right to seek invalidation of European Patent EP 734 as granted and any divisional patent based on that main patent.

In any event, the Court has before it the following applications;

- to take note of the fact that the TATA STEEL group offers to prove the facts related by Michel DUBOIS in his certificates of 9 January 2017 and 12 September 2018 by hearing him,
- to order ARCELORMITTAL to pay the appellants procedural damages of 15,000 euros for each of the two proceedings, on the basis of Article 240 of the New Code of Civil Procedure,
- order ARCELORMITTAL to pay the costs of both proceedings.

The Court thus notes from the outset that the TATA STEEL group limited its appeal to these two essential points mentioned above. As regards the right of the TATA STEEL group to continue to use the knowledge and know-how acquired prior to the application for the main patent EP 734 and the divisional patent EP 581, the TATA STEEL group "*takes note of the fact that the first judge declared himself without jurisdiction since, in his opinion, this question anticipates the question of the existence of the patent and, if applicable, the validity and scope of the patent as it will be granted.*" The TATA STEEL group has reserved the right to bring a separate action in this regard at a later date.

In addition to this main appeal, the Court also has before it the cross-appeal lodged by ARCELORMITTAL, which seeks an order against the appellants (i) to the sum provisionally assessed at 100,000 euros, as damages suffered due to the suspension of the granting procedure of the two contested European patents by the EPO, and this at the request of the second appellant and (ii) to the sum of 15,000 euros as procedural damages for the first instance, on the basis of Article 240 of the New Code of Civil Procedure, as well as to the costs and expenses of the first instance

In any event, ARCELORMITTAL requested that the appellants be ordered to pay the costs of the appeal proceedings and procedural damages of EUR 15,000 for the appeal proceedings.

Having thus limited the scope of the case, the Court also points out that during the hearing of the case on 24 March 2022, it asked various questions and requested clarifications from the parties, which were answered.

The Court transcribes here the topics discussed in the public hearing, in order to avoid having to return to them later:

- It appeared from the submissions and documents exchanged during the appeal proceedings that both the main patent application EP 734 and the divisional patent application EP 581 were deemed to be "*withdrawn*" for the EPO since 13 May 2016 and 22 August 2016 respectively. This raised the question of the relevance of the present proceedings in relation to the co-ownership rights, if not unlimited and free of charge use, of patent applications filed with the EPO. It now appears that by decision of 27 October 2021, the EPO ordered the resumption of the grant procedure of patents EP 734 and EP 581 as from ¹ February 2022, date on which the two-month period referred to in the notification of 13 May 2016 was to start running again (this period was "*suspended*" following the introduction by the TATA STEEL group of the action claiming co-ownership of the patent application EP 734 by its letter dated 9 May 2016 to the attention of the EPO). It is not disputed that ARCELORMITTAL has performed the required acts and has requested continuation of the proceedings under Article 121 EPC as of 24 January 2022. The main patent is said to be about to be granted. As of the date of the pleadings, this decision of the EPO had not yet been taken. The parties did not inform the Court, while the case was under deliberation, whether the EPO had decided on the grant of the patent.

It follows that the proceedings are ongoing before the EPO, if not that the patent applications may have already become patents, without the parties to the present litigation having informed the Court. The consequence is the same, the Court has jurisdiction to hear the present dispute, the parties

having taken care to formulate their claims and pleas in respect of the patent application and in respect of the patent as granted.

- it was alleged in the same pleadings and in some documents not translated into an official language of Luxembourg, that the TATA STEEL group, respectively TATA STEEL IJMUIDEN B.V., came to the rights of its employee Sylvia MEIJERS.

Following the request for clarification, it turns out that the employment of Sylvia MEIJERS was confirmed by letter of 27 June 1995, with effect from ¹ September 1995, which specifies that the employment in question is subject to the conditions, "*as described in the CCT-2 (CAO-2), VUT-CCT (VUT-CAO) and the General Regulations, in their current or future version. The current texts of the CLA (CAO), the General Regulations and the Pension Regulations of the PENSIOENFONDS HOOGOVS foundation are already in your possession.*" This letter provided for the return of a declaration which was attached to it and which had to be signed in order to be considered as an agreement: Sylvia M. MEIJERS signed the following declaration on 7 July 1994: "the undersigned hereby declares that she has received a letter dated 27 June 1995 from HOOGOVS GROEP BV, in which it is stated that she will be employed by the above-mentioned BV as of ¹ September 1995. She states that she agrees with the contents of this letter. It is not disputed that the original employer merged with British Steel to form the CORUS group, whose Collective Labour Agreement and/or General Regulations are currently on file, with a French translation: it appears that in both the 1999 and 2002 versions, point "5.2" deals with "inventions and ideas" and provides that all rights to the employee's inventions and ideas revert to the company, respectively that the employee transfers all such rights to the company.

It now follows without a shadow of a doubt that TATA STEEL IJMUIDEN B.V., and only TATA STEEL IJMUIDEN B.V., has the rights to the inventions allegedly made by Sylvia MEIJERS. This is further evidenced, if necessary, by a testimonial certificate drawn up by Sylvia MEIJERS dated 5 April 2022.

The Court notes that from the outset, i.e. from the summons to the District Court, the applicants and now the appellants, in the operative parts of their documents, have been confusing "TATA STEEL", i.e. the TATA STEEL group, with TATA STEEL IJMUIDEN B.V. They claim that the "In the next line, they ask for an order that "*the Dutch company Tata Steel Ijmuiden B.V. (...), be mentioned as a co-owner in the patent application (...)*". In the paragraph immediately following, they again use the single term 'TATA

STEEL" to invoke the co-ownership right in any divisional application of the patent.

Apart from the fact that this approach is disturbing, it nevertheless raises a problem of interest, or of standing, for four out of the five applicants or appellants. ARCELORMITTAL having referred to judicial caution concerning the formal admissibility of the appeal, the Court is called upon to verify this admissibility.

The judges of the first instance incidentally but necessarily retained this problem, without drawing any consequences. The problem persists at the appeal level. The question is more than ever in the debates, since the TATA STEEL group was led to justify to whom Sylvia MEIJERS had assigned her rights relating to her inventions and ideas. It follows that for the main claim for co-ownership of the main patent application and the divisional patent applications, the appeal is inadmissible against TATA STEEL NEDERLAND TECHNOLOGY B.V., CORUS GROUP LIMITED, TATA STEEL UK LIMITED and SOCIETE EUROPEENNE DE GALVANISATION, who do not have a legitimate, existing or personal interest in acting.

Finally, the Court explains that it will not repeat the facts of the case, which have been set out at length both in the judgment a quo and in the summary submissions, all of which have been summarised above: the Court may refer to them, as an integral part of the present judgment: this concerns both the explanations relating to the hot-dip galvanising process and the contents of the main and divisional patent applications, the "G" equation and the inequalities (A), (B), (C) and (D) as well as the

"The Court will only return to this point occasionally for the purposes of further discussion. The Court will only return to this point in time for the purposes of its developments.

I- TATA STEEL IJMUIDEN B.V.'s application for a declaration of co-ownership

TATA STEEL IJMUIDEN B.V. based its claim on articles 12 and 14 of the Luxembourg law of 20 July 1992, modifying the patent regime.

Article 12, entitled "*Right to a patent*", states:

" 1. *The right to a patent shall belong to the inventor or his successor in title,*

2. If several persons have made the invention independently of each other, the right to the patent belongs to the person who filed the earliest patent application.

3. In the proceedings before the department, the applicant is deemed to be entitled to exercise the right to the patent.

Article 14, entitled "*Application for a patent by an unauthorised person*" states:
"If a patent has been applied for either for an invention which has been taken away from the inventor or his successors in title, or in violation of a legal or contractual obligation, the injured party may claim his right to obtain the patent. (...)".

At first instance, it was agreed to apply Belgian law to the question of co-inventor status in the case of Sylvia MEIJERS, as her research, which was invoked in support of the application, was carried out in Belgium, with the logistical support of an association under Belgian law (CRM), within the framework of an agreement implicitly governed by Belgian law (VRC-CRM).

Article 9 §1 of the Belgian law of 28 March 1984 on patents for invention stipulates :

"If a patent has been applied for either for an invention which has been taken away from the inventor or his successors in title, or in violation of a legal or contractual obligation, the injured party may, without prejudice to any other rights or actions, claim the transfer of the patent application granted as proprietor."

The appeal does not concern the applicable law, so it is appropriate to take up what was thus decided by the court.

The Court also confirms that the relevant provisions of Luxembourg and Belgian law are substantially the same.

Like the judges at first instance and the parties, the Court again cites Articles 60 and 61 of the EPC:

Article 60 entitled "European patent right" states:

"(1) The right to the European patent shall belong to the inventor or his successor in title. If the inventor is an employee, the right to the European patent shall be defined according to the law of the State in which the employee carries out his main activity; if the State in which the main activity is carried out cannot be determined, the applicable law shall be that of the State in which the establishment of the employer to which the employee is attached is located.

(2) If two or more persons have made the invention independently of each other, the right to the European patent shall belong to the person whose European patent application has the earliest filing date, provided that this first application has been published.

(3) In proceedings before the European Patent Office, the applicant is deemed to be entitled to exercise the right to the European patent.

Article 61, entitled "European patent application filed by a person not entitled to do so", states:

"(1) If a final decision has recognised the right to obtain a European patent to a person other than the applicant, that person may, in accordance with the Implementing Regulation: (a) continue the proceedings on the European patent application in place of the applicant, taking over that application; (b) file a new European patent application for the same invention; or (c) request the rejection of the European patent application.

(2) Article 76(1) shall apply to any new European patent application filed under paragraph 1(b).

From the above, it is clear that the claim by TATA STEEL IJMUIDEN B.V. can be brought by any person with an interest and that it is available in two situations, which must be examined.

The subtraction of the invention

While it is true that the various texts mentioned above do not define the term "subtraction", it still means "*the action of appropriating something against the will of the rightful owner*" (Larousse), if not "*the action of appropriating something at someone's expense, respectively the fact of fraudulently removing something from the place where it belongs, of taking possession of it from the person to whom it belongs, of removing it unduly after having produced it, of seizing something illegitimately*" (CNRS).

Thus, there is always a fraudulent character to the evasion, which was neither invoked nor, above all, proven by TATA STEEL IJMUIDEN B.V.

The judges of the first instance were right to dismiss the first instance of the claim: this part of the judgment a quo must be confirmed.

Violation of a legal or contractual obligation

In order to prove the violation of a legal obligation, TATA STEEL IJMUIDEN B.V. claims that ARCELORMITTAL 'took away' the intellectual and creative results of the work that it carried out and shared with the other participants in the framework of the collective research within the VRC, in particular following the communication of the report by Sylvia MEIJERS. She admits, however, that there is a fine line between the two cases of opening up the claim, because the first case could be analysed in the light of the second.

Since TATA STEEL IJMUIDEN B.V. itself refers in this section to the results of research carried out within the MRC and the VRC and

the Court decides that there is no evidence of a breach of a legal obligation and that it is more appropriate to analyse the possible breach of a treaty obligation.

In the event of a breach of a contractual obligation, TATA STEEL IJMUIDEN B.V. alleges that ARCELORMITTAL has breached its obligations under the MRC and VRC by arrogating to itself, on an exclusive basis, the benefit of the results of the collective research carried out jointly by the parties within these associations. It is based on the work carried out by Sylvia MEIJERS and her report of 19 April 2002, in the framework of the VRC 0211 project.

The Court takes the liberty of quoting the texts governing these associations.

According to Article "3" paragraph "5" of the MRC Statutes: *"The rights and obligations that the work of the MRC may give rise to for the members as well as the conditions under which private research and private trials may be carried out are determined by internal regulations adopted by the Board of Directors"*.

These rules of procedure were approved by the Board of Directors on 25 October 2000. It provides in its point "1.1" entitled *"collective research"*, paragraph 1: *"The main purpose of the MRC is to carry out collective research for the full members. This research is aimed in particular at developing and improving manufacturing processes and products. The results of this collective research shall be made available free of charge to the full members who have subscribed to it; subject to what is stated in Article 2, this free availability of the results shall not be transferable to other members or to third parties"*.

Article "2" of the said Regulation, entitled *"Ownership of the results of collective research, including semi-common research"*, stipulates: *"The fate of inventions made and know-how acquired by the staff of the MRC on the one hand and by the staff of the full members on the other, within the framework of the MRC's collective research programme, including semi-common research, and during the period of the research, shall be regulated as follows"*

2.1. The inventions made and the know-how acquired by the staff of the MRC belong to the MRC: the latter bears the costs of filing, maintaining and defending the corresponding patents.

2.2. The inventions made and the know-how acquired by the staff of a full member belong to the said full member: the latter shall bear the costs of filing, maintaining and defending the corresponding patents. (...)

2.3. In the case of collective research, each effective member who has subscribed to the research automatically has a free, non

The beneficiary is granted an exclusive, non-transferable licence, without the right to sub-licence, to use the patents referred to in Article 2.1 and in Article 2.2 and the corresponding know-how in its installations. This licence gives the beneficiary in particular the right to sell and export the corresponding steel products without any hindrance. It is valid for the duration of the patents covering these inventions (...)".

On 16 May 2000, an "R & D Agreement" was signed between ARBED SA, USINOR SA (these companies being integrated within ARCELORMITTAL) and CORUS UK LIMITED on behalf of CORUS GROUP (currently corresponding to the TATA STEEL group), which stipulates in its point "2": "the three groups contribute equally in cash to CRM for the common programme; this gives them also equal rights (...)".

Point "3" says "A Virtual Research Center encompassing CRM and parts of the own R&D activities of the three groups is launched. The contribution in kind of each partner to the VRC should be equal on a multi annual basis: in case of disequilibrium, a cash compensation is foreseen".

Point "4" adds: "*CRM is in charge of the administrative coordination of the work done in the VRC*".

None of these texts deal with the fate of any patents or the rights attached to them. It is only decided that the inventions made by a member or his staff belong to him.

Since TATA STEEL IJMUIDEN B.V. claims to be the author of an invention, through Sylvia MEIJERS, it is up to it to establish the link between this invention and the one claimed by ARCELORMITTAL in the context of the patent applications before the EPO

As mentioned above, the status of inventor, respectively co-inventor, is to be analysed in the light of Belgian law.

In this case, the inventors named in the patent applications are three natural persons, namely Jean-Michel MATAIGNE, Didier DAUCHELLE and Florence BERTRAND. TATA STEEL IJMUIDEN B.V., in order to win its case, would like to see the name of "its" inventor, Sylvia MEIJERS, added.

There is therefore a consensus among the parties to the dispute that inventors are necessarily natural persons, since only the owners, to whom rights have been assigned, can be legal persons.

As for the invention, it appears "*as a technical solution brought to a technical problem, thanks to technical means susceptible of repetition*" (JM MOUSSERON, *Traité des Brevets*, T1, 1984). To be patentable, this invention must be new, and therefore not included in the state of the art.

It must be the result of an inventive step, as well as being susceptible of industrial application (Séverine VISSE-CAUSSE, Intellectual Property Law).

It is accepted in Belgian law that the inventor is the person who has developed the invention. The vast majority of inventions today are the result of research carried out by different people working together in the same laboratory or developing an invention based on the results of previous research by colleagues or other scientists. In principle, each person who has made an inventive contribution to the development of the invention is to be considered the inventor or co-inventor. No distinction is made according to the importance of each person's contribution. The law provides that everyone shall have an equal share in the invention, but the inventors concerned may decide otherwise in writing and acknowledge unequal shares in the invention.

Some nuances are brought by the doctrine: any researcher who has effectively contributed significantly to the conception and implementation of the invention can be identified as an inventor and he will be mentioned as such in the patent application and in the patent. (Professor Alain STROWEL).

Belgian case law regularly holds that only the person who has made a substantial contribution to the invention can claim inventor status.

Thus, the Belgian Court of Cassation, in a judgment of 18 November 2016, decided that "any person who has actually contributed by an intellectual and creative contribution to the making of an invention within the meaning of Article 2, paragraph 1, of the law of 28 March 1984 on patents for invention, must be considered as a co-owner of the patent".

A judgement of the Antwerp Commercial Court of 18 October 2013 had already ruled that only a substantial contribution justifies the qualification of inventor: this judgement had confirmed that it was more a qualitative than a quantitative criterion: the quality of inventor is reserved to persons who have intellectually contributed to the realization of the invention.

This Antwerp case law of 18 October 2013 was thus rightly cited by the judges of the court, who took up the passage where it is stated that the substantial character of the contribution to the invention depends on the circumstances, but must be assessed on the basis of the patent claims as essential features of the invention. In this respect, the size of the contribution is irrelevant, but rather its significance in terms of content in the light of the claimed invention.

From all these definitions of invention and inventor, a clear line emerges, which grants protection only to the one who has made a substantial, important contribution.

The evidence of such a substantial contribution of Sylvia MEIJERS to the inequalities claimed in the main and divisional patent applications must be provided by TATA STEEL IJMUIDEN B.V.: in relation to the patent application EP 734, she applies from page 67 to page 152 of her summary submissions of 14 April 2021. She begins by recalling the objective of the VRC 0211 project, namely to achieve a galvanic layer thickness of 4 μm at a speed of 150 metres per minute. In order to achieve this, Sylvia MEIJERS decided to start with the equation "G", representing the weight, if not the coating thickness. The conclusion drawn from this work with regard to the interaction of the dewatering parameters is that the distance between the sheet and the outlet of the dewatering nozzle must be reduced and/or the pressure of the dewatering gas increased.

TATA STEEL IJMUIDEN B.V. explains that even if Sylvia MEIJERS' research did not concern the question of the corrugation of the coating, which is the sole subject of the inventions claimed by ARCELORMITTAL, the results of Sylvia MEIJERS' work would already have made it possible to obtain corrugation of 0.55 μm or less. Indeed, the eight combinations identified on page "2" of the MEIJERS report of 19 April 2002 would each satisfy at least one of the inequalities (A) or (B), which would be sufficient to obtain a reduced corrugation in accordance with the claimed invention. TATA STEEL IJMUIDEN

B.V. does not claim to have developed the inequalities on which the claimed invention is based, but only to have made it possible to identify windows which ARCELORMITTAL subsequently discovered to cover combinations of parameter values which, in

In addition to achieving a reduced coating weight at high speed, the "*normal spinning conditions*" allowed a waviness of 0.55 μm or less to be achieved.

According to TATA STEEL IJMUIDEN B.V., "*it would be obvious that ARCELORMITTAL carefully examined the results of the VRC 0211 project, including the work of Dr MEIJERS which was communicated to it in the framework of the project. (...) ARCELORMITTAL then "only had to develop inequalities to translate the results of Dr MEIJERS' work"*.

The Court notes that TATA STEEL IJMUIDEN B.V. repeats an impressive number of times in the course of its summary conclusions that the results of Dr MEIJERS' research suggested the same windows of values as those now defined by the claimed inequations, without ever explaining by what mechanisms and paths of thought it is possible to evolve from the simple "G" equation, which is not even the fruit of Sylvia MEIJERS' ideas (this equation was pre-existing in the specialised publications and she used it to specify the value of "k1", by interpreting more than seven thousand combinations of spin parameter values, among which she identified five thousand five hundred and seven combinations

which made it possible to specify the "k1" value at +/- 12.7) to inequalities which make it possible to obtain a corrugation of less than a certain size, i.e. to achieve an objective never envisaged and above all never noticed and even less understood by Sylvia MEIJERS, during her so many tests carried out on a hot-dip galvanising line belonging to the TATA STEEL group

Without going into the intricacies of developing ex post, and for the sake of the case, diagrams that would prove that Dr. MEIJERS' work allowed for an indefinite number of combinations of parameter values that would have been shown to result in a reduced ripple and a more stable ripple, diagrams that would prove that the work of Dr MEIJERS made it possible to obtain an indefinite number of combinations of parameter values that would have made it possible to obtain a reduced ripple, and that this work was already pointing the way to the windows in which the combinations of values of dewatering parameters that would make it possible to obtain this ripple are located, the Court cannot escape the conclusion that no proof has been provided by TATA STEEL IJMUIDEN B.V. The latter limits itself to alleging throughout its many pages of submissions, instead of proving, a link between the results of an abandoned research programme, because it did not make it possible to achieve the set objective, and in particular the first claim of the main patent EP 734.

Assuming, for the sake of argument, that it is correct that some of the values noted by Sylvia MEIJERS verify "*at least one of the inequalities (A) or (B)*", as set out in claim 1 of EP734, It establishes at most that at a time "t" the hot-dip galvanising line, on which Sylvia MEIJERS was doing her experiments, was set up so as to have parameters that can verify "*at least one of*" the inequalities that ARCELORMITTAL invented ten years after the MEIJERS report. It should not be forgotten that the latter only transcribed in its report the combinations that appeared at random from its experiments, without being able to define in a general and abstract way a formula to reproduce them. If this invention, which was the subject of the patent applications, had been so obvious, it is surprising, to say the least, that Sylvia MEIJERS, despite being a specialist in the field of dewatering on hot-dip galvanising lines, did not realise it, and that it took ARCELORMITTAL ten years to "*synthesise*" the work resulting from the VRC 0211 project. Indeed, both TATA STEEL IJMUIDEN B.V. and ARCELORMITTAL would have been well advised to discover, if not to schematise, formulas that would have always allowed them to obtain this reduced corrugation, in order to satisfy the expectations of the automotive industry, which was keen to produce more, faster, at lower cost. Satisfying them at the beginning of the 2000s would have resulted in financial spin-offs, representing an interest for each metallurgical company. This was clearly not the case.

It should be pointed out that Sylvia MEIJERS has mainly specified the value of "k1" in a range of values, not in a single value. Moreover, this value "k1" is absent from the ARCELORMITTAL inequalities. On the other hand, there is no

The Court does not wish to enter into the laborious discussion of the importance of using air or nitrogen as a dewatering gas, nor of the importance of the choice of dewatering gas for obtaining or not obtaining the desired result. The Court does not wish to enter into the laborious developments on the importance of using air or nitrogen as the dewatering gas, nor on the importance of the choice of the dewatering gas in order to obtain or not the expected results, as the parties remain in disagreement on this issue. It is a fact that Sylvia MEIJERS did not dwell on this choice of gas, which is clearly not part of the "G" inequation.

It remains to be said that it is perfectly normal that the other parameters involved in the production process during galvanisation are the same in Sylvia MEIJERS' work as in the invention claimed by ARCELORMITTAL, because these parameters are simply physically present in any galvanised sheet production line.

Moreover, the conclusions on the last page of Sylvia MEIJERS' report are vague and she even indicates that further experiments are still needed to establish certain values.

For the sake of accuracy, the Court further notes that ARCELORMITTAL denies having been aware of the said MEIJERS report prior to the present legal action.

Although Michel DUBOIS' testimonies seem to indicate that he himself was aware of this report from 2002, and that he partially used it for his summary report in 2004, it should not be forgotten that Michel DUBOIS was coordinator of the VRC 0211 project and that he received it in this capacity. It is irrelevant that he was also an employee of USINOR, now ARCELORMITTAL. On the contrary, in his capacity as coordinator, he sent an e-mail, in tempore non suspecto, i.e. on 19 March 2004, before finalising his final report, to the attention of Christian MARIQUE, then

"He is a 'Head Programme Coordinator' in the MRC, in which he complains that CORUS (now TATA STEEL), '*never came and provided almost nothing*'.

It is not relevant to hear Michel DUBOIS as a witness, when, in view of the above, it is not established that ARCELORMITTAL could have used the contents of this report to develop its invention, which is currently the subject of the patent applications in question.

It follows that no contribution, a fortiori substantial, of Sylvia MEIJERS in the development of the invention is reported and that the quality of inventor cannot be granted to her, nor that of co-owner to TATA STEEL IJMUIDEN B.V., no violation of a contractual obligation being reported, with regard to the patent application, respectively to the main patent EP 734.

As for the claim of joint ownership of the divisional application of patent EP 581, TATA STEEL IJMUIDEN B.V. has indicated that it claims joint ownership
"For the same reasons as those justifying TATA STEEL's recognition as joint owner of the EP 734 patent application (and the resulting patent).

In view of the above, it must be held, for the same reasons, that TATA STEEL IJMUIDEN B.V. is not to be regarded as a co-owner of a divisional application in connection with the main patent application, since no breach of contractual obligations has been reported either.

II- The TATA STEEL group's request for an unlimited and free right to use the claimed invention and, if applicable, the patent as granted

The TATA STEEL group bases this head of claim on the collaboration of the parties to the dispute within the MRC and subsequently the VCR. Such a free use would have been foreseen, also within the VRC, thus echoing the article "2.3 of the MRC's internal regulations.

He argues that it would be sufficient for him to prove a link between the research to which he contributed and the inventions claimed by ARCELORMITTAL. It would be irrelevant if the claimed invention had not been made at the time of the collaboration: the "*Confidentiality Agreement*", although not signed, would nevertheless testify to the fact that the parties had reached an agreement on the general principles. This "*Confidentiality Agreement*" would undeniably allow the TATA STEEL group to claim a free and unlimited right of use of the claimed invention. Indeed, even if a project does not lead to the final results initially expected, it would still be likely to produce results that could be of interest and therefore be (re)used at a later stage.

The TATA STEEL group then comes, again and again, to its key claim, which it says serves as evidence, that it does not claim "*that Dr MEIJERS alone developed the claimed invention, or even that she immediately understood the implication of her work for the corrugation of the sheet metal coating. It only claims (and proves) that Dr. MEIJERS' work made it possible to obtain an indefinite number of combinations of parameter values which it appeared to make it possible to obtain a reduced corrugation in accordance with the claimed invention and, more generally, that the lesson drawn from the said work was in fact already pointing the way to the windows (today defined by the claimed inequalities) in which the combinations of dewatering parameter values making it possible to obtain a reduced corrugation are located*".

The Court recalls the provisions in question, reproduced in extenso above: there is certainly Article "3" paragraph 5 of the MRC statutes and the provisions of the

The internal rules of the MRC, Article 1.1 of which does indeed provide for the free use of the results of collective research within the MRC by the "*full members who have subscribed to it*". However, it should not be forgotten that Article "2" regulates "*the fate of inventions made and know-how acquired by the staff of the MRC on the one hand and by the staff of the full members on the other, within the framework of a collective research programme of the MRC, including semi-common research, and during the duration of the research*" (the Court underlined two passages): there is no mention of research carried out within the framework of the VRC, nor in particular of the duration subsequent to the research programme, which is expressly excluded. There is no point in referring to Article 2.3, when it is clear that the claimed invention was not made at the time of the collaboration, either within the MRC or the VRC, but rather ten years later, outside the context of these associations.

The "R & D Agreement" signed on 16 May 2000 between ARBED SA, USINOR SA and CORUS UK LIMITED on behalf of CORUS GROUP does not include any provision relating to the rights reserved for the results of joint research. What remains is the "*Confidentiality Agreement*" for which the parties agree that it was never signed. Their agreement ends there.

According to the minutes of the VRC committee meeting of 31 October 2001, especially point "III.3" paragraph 2, there was no request from the members of the VRC programme committee to conclude a general agreement on industrial property rights within the VRC. It was proposed to sign secrecy agreements per project.

In an e-mail of 15 January 2002 from the MRC to CORUS, information is given that a meeting is planned to prepare a reference document to be used as a confidentiality agreement in the framework of the RCV projects.

The next day, 16 January 2002, a similar email was sent by the MRC to USINOR: a meeting would be held in Brussels on 30 January 2002. The main purpose will be to prepare a reference document to be used as a confidentiality agreement by the Programme Committee in the framework of the RCV.

An internal CORUS memo, dated 6 February 2002, provides information on the meeting in Brussels on 31 January 2002. This document only proves that the meeting took place and what the people of CORUS retained from it. It is a one-sided document.

This was followed by an exchange of e-mails on 8 February 2002, concerning in particular the agreement on the minutes of the meeting, prepared by the CRM. Changes were made to the draft minutes.

From these documents it is clear that the VRC members did not want to make a general commitment on intellectual property rights concerning the results obtained in their research projects, but opted for a case-by-case solution. Already at the end of January 2002, the MRC launched negotiations for such a confidentiality agreement between the VRC members, without reference to a specific project.

Even if these negotiations were externalised through exchanges of emails including proposed minutes of meetings, the fact remains that no formal agreement emerged. These e-mails should be considered as snapshots at a moment "t" of the negotiation: one cannot extract a part of them, which probably already seems to be sufficiently advanced, to say that it is applicable between the parties. The very nature of the negotiation phase is to leave the door open to modifications, additions and deletions, which are made within a general framework. As long as the negotiations have not resulted in a final text, accepted and signed by all the parties, they are not legally committed.

Nor can Rob BOOM's certificate establish the conclusion of such a contract.

In this case, the Court notes that there is no formal "*Confidentiality Agreement*". The Court will disregard this.

Following the example of what was decided for the right of co-ownership, the Court can only reiterate its reasoning which led to the conclusion that there is no evidence of a link, however minimal, between the work carried out by the TATA STEEL group, It is therefore superfluous to have to prove that there is no link, however small, between the work carried out by the TATA STEEL group, through Sylvia MEIJERS, within the VRC association and the invention claimed by ARCELORMITTAL in the context of the main and divisional patent applications before the EPO, respectively of the patents that are to be authorised. It is therefore superfluous to have to analyse once again the arguments developed in this respect and to determine what results this free and unlimited use would relate to.

In the absence of evidence, the TATA STEEL group's requests for a free and unlimited right to ARCELORMITTAL's claimed invention remain pure allegations. The Court therefore does not grant them.

III- ARCELORMITTAL's cross-appeal

This cross-appeal concerns the reversal of the judgment insofar as it did not grant ARCELORMITTAL's counterclaim for damages for the prejudice suffered as a result of the suspension, at the request of the second appellant, invoking the present proceedings, of the granting of the two patents at issue by the EPO. This behaviour of the TATA STEEL group is alleged to be wrong and its sole purpose is to harm ARCELORMITTAL, by delaying the moment when, under the patents

ARCELORMITTAL will be able to assert its exclusive rights against third parties, including the TATA STEEL group.

ARCELORMITTAL argues in support of its claim that the suspension is not inevitable, that the TATA STEEL group has misused Article 61 of the EPC, that it has voluntarily delayed bringing the present proceedings, without any chance of success, especially in appeal proceedings, and that it has sought to prolong the proceedings.

ARCELORMITTAL pleads that the existence and extent of this damage is not in doubt: it currently estimates it at 100,000 euros.

The TATA STEEL group is opposed to this.

As the burden of proof lies with ARCELORMITTAL, it must prove not only the fault of the TATA STEEL group and the damage it has suffered, but also the link between this fault and the alleged damage.

As regards fault, the Court notes that the TATA STEEL group is accused of having abused its right to suspend the patent procedure pending before the EPO. However, this right derives from Article "61.1" of the EPC, which was cited above, as well as from Article 14(1) of the Implementing Regulations of the EPC. This Article states: "*If a third party furnishes proof that he has instituted proceedings against the applicant for the purpose of obtaining a decision within the meaning of Article 61(1), the grant procedure shall be suspended, unless that third party declares in writing to the European Patent Office that he consents to the continuation of the proceedings. Such consent shall be irrevocable (...)*".

It follows that the TATA STEEL group would have had the option of only notifying the EPO of the existence of the present proceedings, while agreeing to the continuation of the proceedings before the EPO. This refusal was maintained from 9 May 2016 until at least 11 September 2019.

It is important to remember that ARCELORMITTAL could not become a
"In addition, ARCELORMITTAL could no longer amend its application in view of the advanced stage of the patent grant procedure. Moreover, in view of the advanced stage of the patent grant procedure, ARCELORMITTAL could no longer amend its application: it even expressly undertook to the EPO, by letter of 15 November 2016, not to withdraw or abandon the disputed patent applications until a final decision has been reached in the present proceedings.

However, it is incorrect to say that section "61.1" would only allow action to be taken in the case of a claim to full ownership. Indeed, the words "*to a person other than the claimant*" certainly do not exclude a potential co-owner from bringing the claim.

ARCELORMITTAL's arguments to prove that the TATA STEEL group voluntarily delayed bringing the present proceedings, that it knew that it would have no chance of success and that it did everything possible to prolong the proceedings, do not convince the Court.

The only thing that remains is the fact that the TATA STEEL group insisted on suspending the granting of the European patents: it is not appropriate to sanction the fact of having wrongly exercised a legal action or of having unjustly resisted it, since the exercise of a legal action is free, but only the fact of having abused one's right by committing a fault that is independent of the mere exercise of legal remedies. This intentional fault engages the civil liability of the plaintiff towards the defendant, if the latter proves to have suffered damage.

In the present case, the Court notes that ARCELORMITTAL still fails to prove that the appellants' legal action meets these conditions, or even that it constitutes a fault or negligence, just as it does not provide proof of an abuse committed in requesting the application of Article 14 above. If it is true that their action was unsuccessful, it cannot be said that they abused their right to take legal action and request a suspension, as provided for by a text that is valid as a law.

In order to be precise, the Court adds that even if a fault had been found against the TATA STEEL group, ARCELORMITTAL would have failed to prove concrete damage. It is not enough to assert that this damage is certain and extensive: it should have been supported by documents, in particular market studies indicating which licence contracts ARCELORMITTAL could have concluded following the obtaining of the patent(s), how much money it definitively lost through the loss of the six years of proceedings before the Luxembourg courts... The Court can only note the total absence of documents submitted on this subject

The judgment should therefore be confirmed.

IV- Ancillary applications

In view of the outcome of the appeal proceedings, the claims of the TATA STEEL group for procedural damages under Article 240 of the New Code of Civil Procedure are to be deemed unfounded.

In view of the same outcome, however, it seems unfair to leave costs not included in the costs to be borne by ARCELORMITTAL, so that it should be awarded, by way of reversal, procedural damages of EUR 7,500.

15,000 for the first instance and to award him one for the appeal proceedings as well.

The award of costs at first instance is sound and should be confirmed.

For the appeal proceedings, the TATA STEEL group should be ordered to pay all costs and expenses.

PAR CES MOTIFS

the Court of Appeal, Ninth Chamber, sitting in civil matters, ruling in contradictory proceedings,

Having regard to Article 1 of the Act of 17 December 2021 amending the amended Act of 19 December 2020 on the extension of measures before courts subject to civil procedure ;

declared the main appeal inadmissible for having been directed, as regards the joint ownership claim, against European patent applications EP 734 and EP 581 and/or the patents that may be granted by the Dutch company TATA STEEL NEDERLAND TECHNOLOGY B.V. (formerly known as "CORUS TECHNOLOGY B.V."), the English company CORUS GROUP LIMITED (formerly known as "CORUS GROUP PLC")

("CORUS"), the English company TATA STEEL UK LIMITED (formerly known as "CORUS UK LIMITED"), and the Belgian company SOCIETE EUROPEENNE DE GALVANISATION S.A. (abbreviated as "SEGAL"),

declares the main appeal admissible in pure form,

declares the cross-appeal admissible in pure form,

declared the main appeal unfounded,

declared the cross-appeal partially founded,

("CORUS UK LIMITED"), and the Belgian company SOCIETE EUROPEENNE DE GALVANISATION S.A. (abbreviated to "SEGAL"), to pay the Luxembourg company ARCELORMITTAL SA the sum of 7,500 euros as procedural indemnity for the first instance,

confirms the judgment of 17 July 2019, albeit partially on other grounds, in addition,

declared admissible and well-founded the request of the public limited company under Luxembourg law ARCELORMITTAL SA to obtain procedural damages in the amount of 15,000 euros, on the basis of Article 240 of the New Code of Civil Procedure,

orders the appellants, each for its part, namely the Dutch company TATA STEEL IJMUIDEN B.V. (formerly known as "CORUS STAAL B.V."), the Dutch company TATA STEEL NEDERLAND TECHNOLOGY B.V. (formerly known as "CORUS TECHNOLOGY B.V. "), the English company CORUS GROUP LIMITED (formerly known as "CORUS GROUP PLC"), the English company TATA STEEL UK LIMITED (formerly known as "CORUS UK LIMITED"), and the Belgian company SOCIETE EUROPEENNE DE GALVANISATION S.A. (abbreviated to "SEGAL"), to pay to ARCELORMITTAL SA, a company incorporated under Luxembourg law, the sum of 15,000 euros by way of procedural indemnity for the appeal proceedings,

orders the appellants, each for its part, namely TATA STEEL IJMUIDEN B.V. (formerly known as TATA STEEL IJMUIDEN B.V.), a company incorporated under Dutch law, to pay the costs of the appeal.

(formerly known as "CORUS STAAL B.V."), the Dutch company TATA STEEL NEDERLAND TECHNOLOGY B.V. (formerly known as "CORUS TECHNOLOGY B.V."), the English company CORUS GROUP LIMITED (formerly known as "CORUS GROUP PLC"), the English company TATA STEEL UK LIMITED (formerly known as "CORUS UK LIMITED"), and the Belgian company SOCIETE EUROPEENNE DE GALVANISATION S.A. (abbreviated to "SEGAL"), to pay the costs of the appeal proceedings, with diversion to the benefit of the limited liability company ARENDT&MEDERNACH, represented for the purposes of the present proceedings by Maître Astrid WAGNER, assisted by Maître Fernand de VISSCHER and Maître Philippe CAMPOLINI.

This judgment was read out at the above-mentioned extraordinary sitting by Carole KERSCHEN, President of the Chamber, in the presence of the Registrar, Laetitia D'ALESSANDRO.