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Database sui generis right: what is a substantial investment? A tentative definition

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***IIC 2 Introduction**

The Database Directive was enacted over eight years ago.¹ It had to be implemented by 1 January 1998. Thus, already six years have passed since courts started to decide upon issues of sui generis rights and a relatively abundant body of case law has emerged from the national courts.² Surprisingly there has not been a vast amount of literature that summarises and comments upon this case law,³ whilst the great number of articles written at ***IIC 3** the time the Directive was adopted actually mainly criticised the vagueness of many of its terms, among other things, especially the concept of substantial investment.⁴ Like the notion of originality in copyright law, the concept of substantial investment is at the heart of the protection of databases. It is a requirement for protection and establishes the level at which a database will be protected by the often harshly criticised sui generis right.⁵ It is therefore crucial to know what lies beneath this concept and what it actually means, since it is not defined in the Directive.⁶

This article reviews the national case law and summarises the views of commentators relating to the concept of substantial investment. The discussion will show that the decisions rarely specify what the level of substantiality of an investment is. The reason is that, in most cases,

the investment is so enormous that there is no discussion as to whether the required level of ***IIC 4** substantiality is attained. However, some (rare) decisions elaborate on the meaning of substantiality and provide some answers. Commentators, on the other hand, are divided on the issue of whether the investment should be high or low. This article attempts to determine what the level of substantial investment is on the basis of a construction of the Directive and of its aims, with the help of arguments developed in the case law and in the literature. It is divided in three parts: the nature of the investment (1), the substantiality of the investment (2), and the quantitative or qualitative character of the investment (3). The question of the object of the investment itself (the obtaining, collecting or verifying of the contents) will not be examined in the context of this article.

The Concept of Substantial Investment

Article 7(1) of the Database Directive states: "Member States shall provide for a right for the maker of a database which shows that there has been qualitatively and/or quantitatively a substantial investment in either the obtaining, verification or presentation of the contents...."

1. Nature of the Investment

What is an investment? The Directive does not directly define the term investment. A quick look at a few dictionaries shows that investment means putting money, effort or time into something with the expectation of a profit or an advantage.⁷ It is a term that few commentators address. It has been described in the literature as the transfer of the energy (power, money, abilities) of an investor to an object (person or thing) with the expectation of a return.⁸ The return does not always occur; this is why an investment is not without any risk.⁹ Several recitals indirectly define what investment means, since they summarise the dictionary definitions. In fact, the definition of the term investment and its nature is the same. Recital 7 of the Directive states that "... the making of databases requires the investment of considerable human, technical and financial resources". Recital 39 speaks more generally of financial and professional investment. Recital 40 specifies further the nature of the investment. The protected investment can be financial, or can result from time, energy or efforts devoted to the making of the database.¹⁰

***IIC 5** In other words, a summary of the recitals shows that the investment can be financial, material or human.¹¹ The human investment is in time, effort or energy whereas the material investment is in the acquisition of equipment to build the database. The financial investment speaks for itself.

In fact, a human investment always seems to result in a financial investment since time is money, and effort or energy generally takes time. The investment in employing a person or in using the services of an independent contractor will necessarily boil down to the payment of money. Even if a person is self-employed, the human labour will necessarily be quantifiable in time spent. However, there can be other types of human investments such as a "relational investment". This type of investment would relate to the fact that it has been hard to constitute and maintain the team who built the database. Other human investments can be investments in competences, in technical creativity or a psychological investment.¹² Those human investments are less easily quantifiable in money. On the other hand, a technical or more generally a material investment always boils down to a financial investment.¹³ A material investment is investment in equipment, and therefore it will always be a financial investment since the equipment must be bought. Thus some believe that referring to a financial investment would have been enough.¹⁴ Nevertheless, the enumeration of all these types of investments by the lawmakers seems to suggest that they wanted to make sure that all types of investment were covered in order not to miss any. Accordingly, the concept of investment should be interpreted broadly. In conclusion, investments that cannot readily be quantified in money, such as those human investments referred to above, should be able to qualify a database for protection.

The courts have generally been confronted with purely financial investments. However, they have also recognised and applied the human and material investment in building databases, as well as the time factor. In such cases, these three types of investment generally exist in combination. Generally, the courts recognised a human investment in employing a number of persons to collect and/or type in data,¹⁵ and a material investment in the acquisition of ***IIC 6** computer equipment.¹⁶ Regarding the time factor, the courts generally recognise a substantial investment when several years have been necessary to build the database,¹⁷ but in a few cases a few hours have been held sufficient.¹⁸

2. Substantiality of the Investment

2.1. The Directive

The Directive is almost completely silent as to when an investment is substantial. The term substantial is not explained or defined but recital 19 gives an indication regarding the required level of investment. This recital states that

as a rule, the compilation of several recordings of musical performances on a CD does not come within the scope of this Directive, both because, as a compilation, it does not meet the conditions for copyright protection and because it does not represent a substantial enough investment to be eligible under the sui generis right.

This recital raises two points. The first is whether a compilation of sound recordings on a CD should really be able to qualify as a database. The second is that the recital might give some indication of how high the investment must be and thus could serve as a guide for courts.

On the first point, the recital does not rule out the possibility that the compilation of recordings of musical performances on a CD can be protected by the sui generis right because it fits the definition of a database. This is because the words “as a rule” suggest that there can be exceptions. Recital 19 thus raises the question whether it is appropriate that a CD of recordings of musical performances should be a database and receive protection by the ***IIC 7** sui generis right at all. Subject-matter that is already adequately protected by copyright or neighbouring rights should not also be protected by the sui generis right.¹⁹ This is implicitly stated in recital 17.²⁰ Thus recital 19 contradicts recital 17. In our view, recital 17 should prevail and such compilations should not attract a sui generis right at all since they are already adequately protected as sound recordings.

Even if this recital is in effect cancelled by recital 17, is it still useful to provide guidance regarding the level of the investment's substantiality? If such a compilation of recordings of musical performances on a CD does not generally reflect a substantial investment, it can be safely assumed that a substantial investment must generally be above the usual investment in a compilation of this kind. It seems that the level of investment must be more than minimal. But above this threshold it is not clear how high the substantiality of the investment must be.²¹ Indeed recital 19 does not establish a low threshold of investment but just gives an example of an insubstantial investment. Also, because of the words “as a rule”, it leaves the door open to the protection of such compilations by a sui generis right if a certain compilation of recordings of musical performances nevertheless reaches the threshold of substantial investment.²² In conclusion, this recital provides rather meagre guidance for the establishment of the required level of substantiality that an investment must have.

2.2. The Literature

As commentators have argued, since there is no other indication in the Directive,²³ it is up to the courts to determine when an investment is substantial on a case-by-case basis.²⁴ “Substantial investment” would thus ***IIC 8** appear to be a wholly subjective test.²⁵ As a matter of fact, the term “substantial” is vague, rendering the protection requirement vague.²⁶ This vagueness creates a problem concerning the delimitation of the concept.²⁷ Hence judges can interpret it either strictly or broadly.

For some, the very fact that the criterion is imprecise is both inevitable and unproblematic.²⁸ Such an undefined criterion does not differ from other criteria, like for instance the notion of originality, which is a criterion whose function varies with regard to the type of work (factual, functional or artistic).²⁹ Despite this, the imprecision of the criterion raises at least two important questions. The first is whether substantiality should be appreciated absolutely or relatively. Must it be appreciated *in abstracto*, thereby favouring the big companies that have enough means to invest, or is this criterion to be assessed in view of the means of the maker, which would lead to a variable criterion that would be harmful to legal certainty?³⁰ In other words, the substantiality of the investment would be adapted to the person making the investment. It seems fairer and more logical that the criterion should be applied uniformly; the size of the undertaking making the database should not matter. But this does not mean that only big companies would benefit from the sui generis right, since the level of a substantial investment does not need to be fixed at a high level.³¹

This leads to the next question: whether the level of the substantial investment should be high or low. Commentators diverge on this issue and can be divided into two groups that reflect the two positions.³² How low is the requirement in the view of those who think it must be low? Generally **IIC 9* commentators are rather laconic on this issue. Some just state that the requirement of substantial investment is symbolic so that any database whose investment is slightly substantial will be protected.³³ For some, it is a low threshold which only excludes entirely insignificant expenditure (“everyday investments”).³⁴ Others think that it should be kept relatively low to stick to the British sweat-of-the-brow criterion of originality but do not explain why.³⁵ Yet others base their argument that the level be low on recital 55, which implies that a thorough control of the database can result in a substantial investment.³⁶ Also, it has been rightly argued that the fact that the data is only available from the database maker and nowhere else is not enough to represent a substantial investment.³⁷

In contrast to these laconic positions, one author elaborates several arguments in favour of a low threshold.³⁸ First, he justifies this view by the non-inclusion in the recitals of the term “*substantial*”. Instead they use the term “investment” alone. He concludes from this argument that a substantial weight is not required for the right to subsist. His second argument derives from the first. He further argues that the harmonisation purpose of the Directive pleads for a low threshold.³⁹ In his view, the criterion to apply is: “what is worth copying is worth protecting”.⁴⁰ It would be a *de minimis* rule and would reduce the legal uncertainty associated with the use of the vague concept of substantial investment.⁴¹

We must respectfully disagree with these two arguments. The first argument is open to criticism because although recitals help to interpret the Directive, they cannot go against it. The Directive uses the terms “substantial investment”. The Directive's text prevails over the recitals, which merely exist to interpret the Directive's text if unclear. The Directive clearly states that the investment must be substantial, thus even if the recitals do not repeat the word substantial, this is irrelevant for the determination of the threshold of investment. In addition, it is not entirely true that the recitals do not insist on the substantiality of the investment. Recital 19 clearly provides that the compilation of sound recordings of musical performances on a CD is (generally) not a substantial enough investment to trigger protection. In the same vein, recitals 54 and 55, which relate to the renewal of the term of protection **IIC 10* of a database, expressly state that there must be a new *substantial* investment in order for the database's term to be renewed. This argument is therefore based on an incorrect interpretation of the Directive.

In support of his second argument, Leistner uses the criterion of sufficient skill, judgment and labour developed by the British courts in copyright law. But he does not explain why this test should be used. Perhaps, since this criterion is low like the criterion of substantial investment in the Directive, it can be used to determine whether a database should be protected. But should this criterion be used? First, it has been overruled by recent case law.⁴² Second, the High Court in the *British Horseracing Board v. William Hill* case⁴³ specifically held that notions of copyright law should not be used to interpret the notions pertaining to the new *sui generis* right, since it is an entirely new right distinct from copyright.⁴⁴ The Directive has two distinct chapters, one dealing with copyright, and the other with the *sui generis* right. Finally, the application of this maxim would have the extremely far-reaching consequence that anything, even a single piece of data, would be regarded as substantial if the user (the one who copies) regards it as worth copying. This would mean that in some cases a database would be protected even if no investment went into it. This contradicts recital 19.

Leistner's third and fourth arguments for a low threshold are as follows. The third is that the Directive's aim at providing a return on investment to database producers pleads for a low threshold. This is not further explained. We will come back to it and develop it later (see *infra* section 2.4.). The fourth argument can be summarised as follows: the risk of monopolisation of information is

probably typically not caused by small and medium-sized collections with a low scope of investment, but precisely by the large commercial databases whose creation ... requires considerable investments. Thus, a too narrow interpretation of the concept “substantial” would ... lead to the contrary and hardly acceptable result that larger database producers could profit from the unprotected products of their smaller rivals by compiling more comprehensive and hence protectable databases at more expense.⁴⁵

Accordingly, the risk of monopolisation of information would tend to be increased. The large majority of commentators prefer the possibility of a compulsory licence rather than increasing the level of the requirement of substantiality.⁴⁶

***IIC 11** This argument is nevertheless flawed. If the products of smaller compilers are not protected, is there a substantial investment (by definition in this view, a high substantial investment) in merely copying many of them? The investment must be in collecting, verifying or presenting the data. Copying (collecting) digitally smaller databases could hardly be seen as an investment at all. Of course those database producers could claim a substantial investment in verifying and/or presenting the data. But the argument is invalid for two other reasons. Since those smaller databases would remain unprotected because the threshold of investment would not be reached, they would remain in the public domain and anyone could access them and copy data freely. The constitution of the bigger database would therefore not risk monopolising information, since the smaller databases would remain accessible and free to all. The only advantage of the bigger database would be its comprehensiveness for the user. The second reason is that, in addition, knowing they would not be protected, the small producers would not create databases in the first place, leaving the bigger producers obliged to collect the data from scratch themselves.

The second view is that a substantial investment must have substantial weight, or in other words must be high.⁴⁷ Under this thesis, not any and every investment of money, time and effort will be sufficient.⁴⁸ Some suggest in this vein that “the substantial investment requirement will not be met by simply putting different works together on a single support”.⁴⁹ The argument is that if the word substantial has been written, it is for a purpose; if not, it would have been omitted in the Directive and any investment would have qualified the database for protection.⁵⁰ The maxim *de minimis non curat praetor* applies.

To sustain this view, the requirement of substantial investment for databases can be contrasted with the mere requirement of fixation for sound recordings,⁵¹ or for that matter also films. The threshold for the database right to subsist is higher than the mere fixation, which is required for a sound recording or a film. This would suggest that the requirement of substantial investment for databases is high rather than low. In our view this comparison does not help much. Since a sound recording or a film can be protected (by neighbouring rights) even if no investment went into its making, it does not ***IIC 12** shed light on whether the substantial investment for databases is low or high. It is surely a stricter requirement than mere fixation, but this does not help to determine how high the investment must be. One commentator adds that recent economic development has shown that the need for protection of databases by the sui generis right is absent in most cases.⁵² This again would plead for the adoption of a high threshold rather than a low one. Unfortunately, that author does not substantiate his statement by any proof. Finally, it has also been argued that, if the threshold is high, the danger of information monopolies is reduced and the public domain is broader.⁵³ This argument seems strong but, as will be examined further below (section 2.4.), it is nevertheless also flawed in almost all cases. Before drawing conclusions on this crucial question of the substantiality of investment, what are the courts' opinions?

2.3. The Case Law

As has been explained above, the degree to which the courts enter into discussions regarding the level of substantiality of the investment is variable. The decisions can be classed on a spectrum at the upper end of which there are cases where it is crystal clear that there has been a substantial investment in view of the large sums invested in the making of the database. These cases are uninteresting since the courts generally do not discuss the requirement of substantial investment further. At the other end, there are cases where there is no investment at all and there is sometimes even a lucrative activity. In between there are a number of cases where the substantial investment was more or less high or more or less low, and just before the end of spectrum there are what can be called the borderline cases where it is arguable whether there was a substantial investment at all. These cases are the most interesting ones to determine the correct level of substantiality.

At the upper end of the scale there are quite a few cases, two of which -- one French, one German -- involve telephone directories. There is also the only British case so far (*British Horseracing Board v. William Hill*) and a few other German and French cases where the investment involved millions or hundreds of thousands of the relevant currency. These cases are therefore not helpful in determining a de minimis indication of what renders an investment substantial. They do, however, show that, as long as important sums (millions and hundreds of thousands) have been invested in making the database, protection will arise quasi-automatically.

In the *France Telecom v. MA Editions*, also called the “3617 Annu” case,⁵⁴ the defendant, MA Editions, proposed a service consisting of the telephone directory through its web site www.annu.com and the Minitel code 3617 ***IIC 13** Annu. The data came directly from France Telecom services 3611

and 3615 Quidonc. MA Editions connected to France Telecom for the first three free minutes and then disconnected and reconnected so that the “downloading” (copying, extraction) of the data was free. The commercial court of Paris found that France Telecom had made a substantial investment in the database. The annual cost to collect the data (the details of telephone subscribers) was 155 million French francs, and the respective cost for management, control and maintenance of the database was 50 million French francs. This case does not help establish the limit at which an investment is substantial, since here it was clear that such enormous sums of money amounted to a quantitatively substantial investment.

In the German *Tele-Info CD* case,⁵⁵ the Federal Supreme Court had no difficulty establishing substantial investment since an undisputedly high expenditure had been invested in the making of Deutsche Telekom's telephone guide published on a CD-ROM (the defendant would have had to pay 93 million deutschmarks to use the claimant's data). In another German case,⁵⁶ a collection of consolidated laws was copied and put on the internet by the defendant. The claimant was able to show an investment of 400,000 deutschmarks to build the database, as well as an investment in personnel and time (several years were necessary to build the database). Again this case does not help to determine the threshold at which a substantial investment exists, since the amount invested was extremely high anyway.

In *British Horseracing Board v. William Hill*,⁵⁷ the High Court of England and Wales readily found that there was a substantial investment in making the British Horseracing Board's database (containing details of horses, jockeys, date and place of races, etc.) as it costs four million pounds per annum to obtain the data, verify and present it.⁵⁸ In addition, the maintenance of the database involved 80 employees and extensive computer hardware and software.⁵⁹ The court nonetheless suggested that the qualifying level of investment is fairly low.⁶⁰ The judge found support for his statement in recital 19.

In a few other French cases similarly high amounts easily qualified databases for protection. A singular example is *Credinfor v. Artprice.com*.⁶¹ In this case, the Paris Court of Appeal ruled that the fact that a company had fixed assets of ##1,268,000 in 1999, ##4,248,000 in 2000 and ##5,272 in 2001, and that its employee base had grown from 25 in 1999 to 59 on 31 December 2001 represents a substantial investment. However, the court did not specify **IIC 14* whether all these fixed assets had been put towards making the database, showing how easy it is to prove a substantial investment in some cases.

In *Cadremploi v. Keljob*,⁶² a French case involving two web sites of job advertisements, the court held that Cadremploi had proved a substantial material, human and financial investment in its database of job ads. There was a substantial investment in verifying and updating the database (it was updated every day until 10 p.m., which occupied four employees full time). The investment was evaluated at 53,658,000 French francs in both equipment and human energy/time.

Three French cases involving the same claimant can also be classed at the upper end of the spectrum. In *Groupe Miller Freeman v. Tigest*,⁶³ Groupe Miller Freeman (“GMF”) published, for each fair they organised, a catalogue comprising information on each trader, in particular its company name, postal address, telephone and fax numbers, trade marks, type of products exhibited and identity of the person in charge. The database showed a substantial investment in view of the number of traders (around 100,000) at each fair and the need to update the database each year. In addition, the claimant proved that it made a substantial investment to create its directory of traders, since computers had been used (material investment), and contracts with independent contractors (financial investment) and employment contracts (human investment) had been entered into. This investment could be evaluated at thousands of French francs. In the appeal, the court added that there were also substantial efforts in promoting the fairs, the establishment of communication plans and the advertising made to encourage the participation of traders. Those efforts gave their content to the database. The court added that it is irrelevant that the exploitation of catalogues generates profits, because the protection by the sui generis right does not exclude making profits. One commentator finds the decision interesting with regard to the level of substantial investment required for a database to be protected by the sui generis right, since in this case the investment was less than one million French francs per catalogue, and such amount is less than in the *Cadremploi* decision.⁶⁴ Another commentator believes that as the substantial investment can be either human, material or financial, rather than a combination thereof, it is easy to obtain protection.⁶⁵

The second case involving GMF⁶⁶ (which, in the meantime, became Reed Expositions France) is less interesting since there is no indication as to the level of the substantial investment. The defendant, Neptune Verlag, operated **IIC 15* a web site in three languages, providing information on all fairs

throughout the world. This information contained a file on each fair, including trade marks, manpower, logos and an alphabetical file including the names of the traders who participated at the previous session, contact details and the location of the booths. Thus it included most of the data included in the claimant's catalogues. The court merely stated that each catalogue required the collection and presentation of information, and each year these acts necessitated financial, material and human investments which are substantial. Perhaps the court referred implicitly to the previous case, since the same GMF catalogues seemed to have been involved and therefore supposedly the same investment was made. A third case involving Reed Expositions France restated the same findings as in the first case.⁶⁷ The court also held that there was substantial investment in constantly verifying and updating the catalogues and in computerising the information.

In Belgium, two cases that discussed the substantial investment are situated in the middle of the spectrum. In the first reported Belgian case, relating to the protection of a database by the sui generis right,⁶⁸ the database consisted of contact details of persons belonging to self-help groups and of the aims, publications and local branches of all self-help groups in the French-speaking community of Belgium. The President of the Court of First Instance of Brussels held that the claimant could prove a substantial investment since it had employed a social assistant and a secretary on a full-time basis for around 10 years, who had listed self-help groups, sent questionnaires to them to obtain information and made sure the details were up to date. Thus, in this case, employing two persons on a full-time basis for around 10 years, who collected and verified the information, was enough to constitute a substantial investment. The *UNMS v. Belpharma* case goes further than the *GMF v. Tigest* case in the sense that only two employment contracts were sufficient to meet the requirement of substantial investment. It seems that GMF's investment was higher than UNMS's since more contracts had been entered into (contracts with independent contractors as well as employment contracts). In addition, computing equipment had been acquired and used.⁶⁹

The other Belgian case, *Spot v. Canal Numedia*, concerned a web site containing the programmes of all Belgian cinemas.⁷⁰ The investment consisted of the elaboration of a procedure to collect the data on a weekly basis, the development or acquisition of the software needed to make the database, the weekly work of manual verification and data input, as well as the proactive management to cover the whole Belgian territory. The investment was substantial because the defendant had to pay 30,000 Belgian francs per month to benefit from the product. The court added, rightly, that the investment *IIC 16 must be related to the making of the database and not the designing and management of the web site. Finally, the fact that part of the investment had been paid off and that there was only a residual investment left (inputting and verifying weekly) was immaterial. There was still a recurring investment.

The *Cap Equilibre & M. Lairis v. Milloz*⁷¹ decision can also be classed in the middle of the scale. The claimant had listed around 30,000 recipes on his web site, www.cuisine.fr. Since the case was a summary judgment, the judge's findings are rather brief. The court only states that there is a substantial investment, without further substantiating its ruling. The claimant argued that he had made a substantial investment since he spent around 15,000 hours of work (human investment) in finding the recipes, contacting the chefs, creating the recipes and their titles and inputting the recipes into a computer. The defendant tried to show that the investment was not so substantial. An analysis of the claimant's web site showed that, in some cases, the claimant had simply copied and mixed the ingredients of basic recipes to create new ones, hence involving little investment. A second method to increase the number of recipes was to change the recipe's title (*i.e.* there were identical recipes but with different titles in the claimant's database). A third method the claimant used was to include identical recipes in different rubrics. The fact remains that if the claimant's allegations were true, even if the defendant alleges that the hours of work were slightly lower, the threshold of substantial investment found in this case is rather high (close to 7 years full time).

At the lower end of the spectrum, mostly French decisions can be found. In *PR Line v. Newsinvest*,⁷² PR Line disseminated financial data on the internet. In order to create its web site, PR Line collected press releases of quoted companies as well as financial reports, verified their origin, put them into shape, included html tags, indexed them under themes and activity sectors, inserted dates and times, and then disseminated the data on the net. It updated the content of the database every 30 minutes. The commercial court of Nanterre held that by doing so, PR Line made a substantial financial, material and human investment. The gathering of the information necessitated several hours of work to verify, present and insert the information in the database. In the appeal, the court did not re-question the substantial investment requirement. The level of investment is rather low since a few hours of work are sufficient to constitute substantial investment.⁷³

Another case displaying a rather low (perhaps the lowest in all decisions) level of substantial investment, or so it seems, is *Sonacotra v. Syndicat Sud Sonacotra*.⁷⁴ The database in question was simply a list of 1,650 employees' *IIC 17 email addresses. Sonacotra had made a substantial financial and human investment in developing, maintaining and updating the database. Sonacotra had shown a number of invoices to prove the investment. Unfortunately the decision is not more specific on the amount of money invested by the claimant. There are reasons to believe, however, that this substantial investment is minimal compared, for instance, to the *France Telecom, Tele-Info CD* and *British Horseracing Board* cases, which involved millions. Collecting, possibly typing in and formatting employees' email addresses in a list most certainly does not require huge sums of money. In this case, it certainly falls below the threshold determined in the *UNMS* and *Groupe Miller Freeman v. Tigest* cases (most probably only a very low number of people were required for a very small amount of time to make and even update the list⁷⁵). This case therefore seems to be situated at the end of the spectrum and proves once more that French courts tend to adopt a low threshold of substantial investment.

Two German cases resemble the *Spot* and *PR Line* cases in the sense that the continuous inputting and verifying of the information is considered a substantial investment. These cases involved the extraction of classified ads on the claimants' web sites by the same defendant.⁷⁶ The defendant's search service allowed users to search for ads listed on other web sites. The two courts qualified the ads section of the claimants' newspapers as databases. The transfer of the classified ads from the offline newspaper to the online version and a continuing review and verification of the content of online databases amounted to a substantial investment in verifying and presenting the contents of the database.⁷⁷ It seems that in these cases the threshold of substantial investment is rather low. The *Landgericht* (District Court) of Cologne granted protection easily by disposing rather quickly of the requirement. The decision only states that "the continuous reception, editing and editorial processing of the ads are connected with a relevant effort in personnel and material cost".⁷⁸

It has been suggested that the interpretation by French courts of the requirement of substantial investment is rather lax.⁷⁹ As a matter of fact, it is very rare that a French court holds that there is no substantial investment.⁸⁰ In conclusion, French courts seem to prefer a lower threshold of substantial investment and grant sui generis right protection rather easily. As can be *IIC 18 seen, a number of German courts also tend to prefer a lower threshold of investment.

At the very end of the spectrum, two French cases held that there was no substantial investment. In the more interesting of the two (*AMC Promotion v. CD Publishers Construct Data Verlag GmbH*),⁸¹ the lower limit reached by the court was the investment in classifying data by alphabetical order. The court held that such classification effort was not a substantial investment. This decision therefore establishes the limit of substantiality. The second is less interesting because it holds that there is no investment, a fortiori any substantial investment. Thus, it does not discuss or establish the level, and hence the limit, of substantiality, since there was no investment at all. In *Groupe Moniteur v. Observatoire des Marchés Publics*,⁸² Groupe Moniteur ("GM") published a review, "Le Moniteur", including the text of calls for tenders and other advertisements of negotiated markets in the field of public works. Observatoire des Marchés Publics ("OMP") sent copies of GM's ads by fax to subscribers. GM sued OMP for illegal extraction and reutilisation. The court held that the catalogue of call tenders was not protected since there had not been any investment in its making. GM had not invested in the collection, verification or presentation of the call tenders. First, GM did not collect the information but just received it from its clients without cost. In fact, GM's clients paid for the advertisements to be included in the review. The company was thus receiving money in order to build the database and not investing money or taking a risk. Second, the advertisements were not checked for accuracy. Actually, GM even made money out of its activity. Finally, it did not make any investment in promoting itself to the advertisers and could not show onerous efforts in presentation. In sum, there was no investment at all, but on the contrary a lucrative activity.

This is not to say, of course, that the fact that a database generates profits precludes the finding of a substantial investment. Database makers expect to make money out of the exploitation of the database. The definition of investment itself shows this.⁸³ This is so even if these profits are allocated to making or updating the base and to ensuring its financing.⁸⁴ This is similar to the ruling in the *Spot* case: it did not ensue from the fact that part of the investment had been paid off that there was no substantial investment, since there was a residual substantial investment in continuously updating the database. The resources from the exploitation of the database should not be deducted in the evaluation of substantial investment, because the database is meant to be profitable. There are therefore two clearly distinguishable cases: *IIC 19 in the first, there is substantial investment; the

investment is rendered profitable, the (later) making of profits resulting from the diffusion of the database. In the second hypothesis, the investment is not substantial since the financial costs of the collection and publication of data are minimal because they are largely compensated by the revenues from the insertion costs of the data (as in *GM v. OMP*).⁸⁵

Closing this analysis of the cases concerning the requirement of substantial investment by descending scale, we have purposely left the most interesting decision to the end. This decision originates from the administrative tribunal of Rostock and dates from 20 February 2001.⁸⁶ After having said that a collection of links is a database because it fulfils the requirements set for the definition of a database, the court makes elaborate considerations regarding the required level of investment. The court is of the opinion that this level is not high. It first summarises the views in the German literature on the topic. On the one hand, some think that the word substantial indicates that a high investment (an investment of “substantial weight”) is required.⁸⁷ On the other hand, others are of the opinion that a substantial investment must be understood as “a minimum of work, effort and commercial investment which has been carried out and which procures to the person who achieved it a commercially usable position”.⁸⁸ For the determination of the level of investment, the British phrase “what is worth copying is worth protecting” should apply.⁸⁹

To establish that the investment level should be low the court bases itself on the recitals. It derives from recital 19 that collections with a minimal investment in time should be protected. It also refers to the aim of the Directive. Databases should be protected to encourage the development of the information market. If only bigger databases were protected, the Directive would miss its aim of fostering the information market. Even if some databases do not require a huge investment they still help to develop the information market. The court also disposes with the argument of the fear of monopolisation. Even if small databases are protected, the data will remain free and anyone can collect the same information in the public domain. On the other hand, the court notes that there is a danger of monopolisation if the makers of smaller databases are not protected against unauthorised reproductions. There will be no incentive to invest, and small databases will not emerge, if they are not protected. The court adds that it would be absurd if the publication of a database should be delayed until it reaches a certain amount in **IIC 20* order to be protected. The court finally sets the limit of the level of substantiality: very simple collections of data are not protected, for example, a small private collection of addresses or a small collection of “*bons mots*” made fortuitously. In this case, the court holds that the claimant's list of links has required a qualitatively substantial investment. Thus, it does not find it necessary to look at how much time and energy was put into the making of the claimant's database. This case is the only one that argues rather sensibly why the threshold of substantial investment should be set at a low level and that sets a limit on substantiality. The arguments of the court together with others will be developed further below in an overall conclusion on the determination of the substantiality level. This case can be contrasted with *Kidnet.de v. Babynet.de*,⁹⁰ the last case discussed in this review of decisions relating to the requirement of substantial investment.

Kidnet had made a collection of 251 links relating to parental organisations, initiatives, self-help groups, etc., and had arranged them alphabetically on its web site. Kidnet was funded by advertising banners. Kidnet claimed that most of Babynet's links were copied from Kidnet's web site. After having held that the collection was a database since it was arranged systematically and methodically (alphabetically in this case) and the elements were individually accessible, the court held that a substantial investment had been made by Kidnet. In order to make its database, Kidnet was in close contact with experts from these parental organisations and verified all the links for their innocuousness and appropriateness before putting them online. The database was thus verified and updated. The court holds that not every investment in time, money and effort can suffice, but that the investment must have substantial weight. It concludes that, in this case, there is a substantial investment in this sense. Apart from these considerations the court does not go into more detail on the manner in which a substantial investment must be evaluated. It seems therefore that the two rulings (*Kidnet* and the ruling of the Rostock court) are totally contradictory on the establishment of the level of substantiality.

2.4. Concluding Comments

In conclusion, after having reviewed all these cases, it seems that the limit where substantial investment will not subsist is constituted by a simple alphabetical classification (*AMC Promotion v. CD Publishers Construct Data Verlag GmbH*), a small list of private addresses or a small list of “*bon mots*” fortuitously made (Rostock court, 20 February 2001, *Datenbankeigenschaft von*

Hyperlinksammlungen). Apart from these two cases, the other two cases that show the lowest limit at which courts will hold that there is still a substantial investment are *Sonacotra* and *PR Line*. In these cases, a few hours of work were sufficient to attract protection. The analysis has also ***IIC 21** shown that French judges are the most generous. The German courts are split over the issue whether the level of substantiality should be high or low. In general, however, the courts of the Member States seem to favour a low level⁹¹ and it is rare that a database does not qualify because the investment is insubstantial. The courts also generally do not go into elaborate reasoning as to whether the investment threshold should be high or low. The issue is therefore not clear-cut in the case law.

As has been seen, the question also remains uncertain in the literature, since authors are divided into two groups, those advocating a high level and those advocating a low one. As has also been seen, not many arguments have been developed to justify the two opinions, and those that have been developed are not (well) justified. What else can be said in order to try to determine the threshold of substantiality?

First, the word “substantial” itself seems to indicate that the level should be high. The main argument advocating a high threshold is that if the threshold is high, the danger of information monopolies is reduced and the public domain is broader.⁹² However, this argument is weak, if not totally flawed. This is because the making of a database of pre-existing elements does not create a monopoly. These elements are still collectable by anyone interested in making an identical or similar database.⁹³ Like copyright and unlike patent law, the *sui generis* right is only an anti-copying right.⁹⁴ The elements remain in the public domain, no matter how high or how low the threshold of substantiality is. The threshold chosen will not influence the size of the public domain. Since the Directive only protects substantial investment in *collecting* -- not creating -- data, there is hardly ever a possibility to monopolise information.⁹⁵ In one not too rare situation there can nevertheless be a monopoly. It is the situation of a database comprised of works available only ***IIC 22** in a unique example, such as paintings and sculptures. In this case the museum or gallery will be a *de facto* sole source producer, and taking a photograph of the works will constitute an unlawful extraction. The monopoly arises because such works are not reproducible like information. Once collected they do not “leave an exemplar in the public domain”. There should be a distinction between the two situations of museums or galleries concerning works in the public domain on the one hand, and works that are still protected by copyright on the other. In the case of databases consisting of unique works that are already in the public domain, there should be a compulsory licence, written in statutory law (Directive). This means that visitors should be able to take pictures or film the works (as long, of course, that they do not damage them thereby, e.g. by flash).⁹⁶ The case of a gallery (more often than a museum) composed of protected works is the same as that of the assignment of protected works addressed hereunder.

Another possible problem close to monopolisation that certain databases can create is the following. If a protected work is assigned to a single database maker, it might be an infringement of the *sui generis* right to extract the whole or a part of this work. Normally the reproduction in full of a protected copyright work is also a copyright infringement, so the fact that the work is included in a database does not change that. However, the database right should not prevent a user from exercising the exceptions to copyright merely because it is included in the database. Thus, if it is necessary to reproduce or communicate the whole or a substantial part of a work, e.g. for purposes of reporting current events or for purposes of criticism or review, the fact that the work is included in a database should not prevent the application of the copyright exceptions. In other words, the *sui generis* right should not be a means to circumvent the copyright exceptions. An additional provision could be included in the Directive to address this specific problem.

Another argument pleading for a high threshold is constituted by the rather “undeserving” subject-matter of the *sui generis* right (unoriginal collections of data). Pure information as such has never been the object of any intellectual property right and substantial investment is already a low requirement compared to the protection requirements of other intellectual property rights. This is a stronger argument.

Yet the threshold of substantiality must be determined by construing the Directive and respecting its aims, according to the legislature's intent. The Directive favours the creation of databases and thereby aims at encouraging a flourishing information market (recitals 3, 9-12). As argued by the Rostock court, if only bigger databases were protected, the Directive would miss its ***IIC 23** aim of developing the information market. Even if some databases do not require a huge investment, they still help to develop the information market. There would be no incentive to invest in small databases if they were not protected. A low threshold favours the creation of small and medium-sized undertakings and creates more equality than a high one. Having a high threshold would mean

discriminating in favour of big companies that have the means to create databases. If the required investment level is high, small undertakings cannot become database makers. A further argument in favour of a low threshold was given by the Rostock court. It noted that it would be absurd if the publication of a database should be delayed until it reaches the level required for protection to subsist. It would retard the availability of a database on the market because of the uncertainty of it reaching the required threshold. This goes against the Directive's aim of encouraging database creation, and even against the public's interest in having access to more databases. Finally, perhaps a less strong argument is that it is also easier to set a low level because, if the substantiality is set at a high level, the question remains as to how high it must be. Setting a low threshold allows the exclusion of everyday investments in small collections, such as those described in the decision by the Rostock court.

It remains that a number cannot and should not be arbitrarily fixed (e.g. 100, 500 or 1,000 hours of human work, or a cost of 1,000, 2,000 or 5,000 euros or pounds for equipment, or the equivalent of 1 or 2 salaries for 1, 2 or more months or years), and a great deal of uncertainty in the notion of investment must be tolerated. Some have argued that if concepts are too hazy, harmonisation is hard to achieve. Their interpretation will vary from under-protective to overprotective.⁹⁷ It is also likely that Member States will interpret the concepts according to their interests.⁹⁸ Of course, the relative haziness of the criterion of substantial investment has both advantages and disadvantages. This alleged uncertainty can also be seen as a rather positive flexibility.⁹⁹ It is, after all, a question of fact which has to be appreciated on a case-by-case basis by the judges. This situation is not unfamiliar to other intellectual property rights. It is similar to the situation concerning originality in copyright law. A certain amount of vagueness always exists. Originality is a criterion that has a variable geometry.¹⁰⁰ This character has not prevented the law from developing normally and remaining fair. The sui generis right is a completely new intellectual property right, just beginning to ***IIC 24** develop its own rules through case law. The beginnings of copyright surely were as uncertain, since some of its concepts fixed in statutory law are also somewhat vague.¹⁰¹ Thus it is rather normal that there are conflicting views and decisions on the topic. At the end of the day, it is the highest court, the ECJ, that will have to determine the threshold of substantial investment, and it is of course not yet possible to make a definitive statement of what it will be.¹⁰² From the perspective of both common sense and the majority of the case law, it seems rather certain that an investment consisting in the purchase of only one computer or in just a few hours (e.g. one day) of work is too insubstantial to trigger the necessary substantial investment in order to benefit from the sui generis right. Beyond this, nothing is certain. The only certainty is that the greater the investment, the greater the possibility of protection and vice-versa.¹⁰³ This compares to the principle of the idea/expression dichotomy in copyright law whereby the more detailed an idea is, the closer it is to an expression and the more chance it thus has to be protected.¹⁰⁴ As is known, this is as close as one can get to the certainty or foreseeability of the idea/expression principle.¹⁰⁵

A last word has to be said concerning the interpretation of the substantial investment requirement. French commentators have argued that there is reason to believe that French courts in their determination of the substantiality of the investment will use unfair competition principles.¹⁰⁶ This is because the sui generis right is a codification of parasitism or slavish imitation, a branch of unfair competition law. In this view, what will be taken into consideration is not the absolute value of the investment but rather the importance of the investment saved by the copier. It has been argued that use of unfair competition principles was made in the *PR Line v. Newsinvest* case.¹⁰⁷ It is said that the court actually applied an unfair competition notion (use someone's investments without paying) rather than the notion of substantial investment in the Directive. According to this opinion, there is confusion ***IIC 25** in the court's mind between sui generis right and unfair competition. Since the sui generis right is inspired by unfair competition,¹⁰⁸ this is not too surprising.

However, it is not appropriate that national courts use their unfair competition law principles to determine what should be a substantial investment. Since all national unfair competition laws differ, it is more than certain that the results of such application will lead to divergent case law. The sui generis right is an entirely new right, a creature of European law, not derived from any particular national unfair competition law. It could even be argued that the legal terms used in the Directive are Community concepts which should accordingly receive a uniform interpretation.¹⁰⁹ In this particular case, if the unfair competition notion of "using someone's investments without paying" is not further qualified, for instance if the investment did not have to be substantial to grant protection to the database maker, this would not respect the Directive. It would be wrong to make this principle coincide with the requirement of substantial investment. The sui generis right would be applied too broadly. In conclusion, it is not recommendable that national courts apply their unfair competition law

principles to decide upon substantial investment since it will probably lead to different results in the Member States. However, this is not to say that unfair competition law principles cannot be applied in sui generis right cases. If these principles do not contravene the Directive, they can be used. The foreseeable problem mentioned above is, however, the disparity of unfair competition law principles in Member States and the probable diverging results that could ensue. The ECJ will soon have to decide upon a number of concepts used in the Directive¹¹⁰ *IIC 26 and in so doing it could be inspired by some national unfair competition law principles. In choosing concepts from a particular national unfair competition law which respect the Directive's concepts, it would unify interpretation and provide guidance to national courts so that the latter do not have to resort to their own, most probably diverging, unfair competition law concepts and principles.

3. The Quantitative and/or Qualitative Character of Substantiality

Once again the terms “quantitatively” and “qualitatively” are not defined or explained in the Directive. Whether an investment is substantial can be evaluated alternatively or cumulatively as evidenced by the words “and/or” used in Art. 7(1). Hence, whatever the quantity of the data included in the database, if they represent a qualitatively substantial investment, the database can be protected. The quantitative criterion is objective, while the qualitative one is subjective. The words qualitatively and quantitatively are vague.¹¹¹ Like the term “substantial”, this haziness can be an advantage or a disadvantage. Since there is no guideline in the Directive, states may be more likely to measure the investment according to their own potential, the position they occupy in the market, and their own historical rules.¹¹² Hence, even with these criteria in addition to the criterion of substantial investment, differences between Member States may remain.

What is a quantitatively substantial investment? Commentators are rather laconic on this point if not totally silent,¹¹³ perhaps because for them it goes without saying. A quantitatively substantial investment can mean an investment in the collection, verification or presentation of a great number of data. Or it can mean that a lot of money, time or energy has been put into the collection, verification or presentation of the data, which finally boils down to mean just “substantial”. If this were correct, then it would contradict the Directive since it would mean that, for a qualitative investment, a lot of money, time or energy is not necessary. Since it must be assumed that the lawmakers have not repeated or contradicted themselves, it must mean that a lot of data has been collected or verified or presented. It is a question of the quantity of the database's elements.

*IIC 27 The meaning of “qualitative” is not directly clear.¹¹⁴ Quality seems to relate to the quality of the elements gathered, verified or presented. This means that, in certain areas, the obtaining of just a few data can constitute a qualitatively substantial part of the contents of a database.¹¹⁵ Views as to the meaning of the term “quality” relating to the investment can be classified in two groups whose opinions are not exclusive of each other but can be combined. A first group of commentators believe that there is a merger or identity between the concepts of qualitatively substantial investment and of originality,¹¹⁶ or at least that it will be difficult to draw a line between qualitative investment and originality.¹¹⁷ Originality for a database subsists in the arrangement or in the selection, the choice of the elements. A qualitatively substantial investment can subsist in the choice of information, the ergonomics of access and use modes (the presentation).¹¹⁸ Presentation can equate with arrangement. If this choice or arrangement is original, then there is a coincidence between a qualitatively substantial investment and originality.¹¹⁹ Consequently, “a database that qualifies for copyright protection will almost invariably qualify for protection under the sui generis right”.¹²⁰

In sum, protection by the sui generis right can be obtained through sweat of the brow or intellectual creativity, separately, and if a presentation is both original and has required a substantial investment, the two types of protection (copyright and sui generis right) will be superimposed (two distinct but similar modes of protection will accrue for the same object).¹²¹ This, of course, means that the database maker would be rewarded twice for the same effort and this should be avoided. However, there can be arrangements and choices that are not original but could still be qualitatively substantial. So in some cases, there will not be a coincidence between originality and qualitatively substantial investment. If this interpretation proves correct, the Directive should be revised to make clear that if the database qualifies for protection under copyright, it can only qualify for the sui generis right through a quantitatively substantial investment or a qualitative one that does not amount to originality.

*IIC 28 The second group of commentators merely give examples of qualitatively substantial investments. The invention of a new business idea,¹²² “those entries on which market success depends, *i.e.* those for which a demand exists”,¹²³ the acquisition of important or valuable works, data

or materials (e.g. the purchase of a famous painting) or professional know-how invested in the database by the maker¹²⁴ (e.g. scientific, innovative or expert work which cannot be protected by copyright¹²⁵) could qualify as a qualitatively substantial investment. Thus a qualitatively substantial investment generally boils down to a financial investment.¹²⁶ It is true that, in most cases, a qualitatively substantial investment can be evaluated quantitatively. For instance, purchasing a valuable (in terms of quality) painting is in most cases very costly.

These examples suggest four things. First, ideas can be protected by the sui generis right if they represent a qualitatively substantial investment. The sui generis right could thus be a way to protect ideas, which are unprotectable by other intellectual property rights such as patents, which protect ideas only under certain conditions (novelty, inventiveness and industrial application). Second, it suggests that quality is to be judged by the variable of the user's interest. If an item is interesting for the user and is therefore in high demand, it represents a qualitatively substantial investment. Third, the database can qualify for protection if the inclusion of an element in the database has required a lot of know-how or expertise, since this represents a qualitatively substantial investment. As with ideas, this means that otherwise unprotectable know-how could be protected by the sui generis right. Finally, the quality criterion raises another important problem: the possibility that the quality of a work or information fluctuates with time. Is the database no longer protected if a work or a piece of information included in a database loses its value over time? This criterion also renders courts to be the judges of the quality or merit of the contents of a database. This has been disparaged in copyright law and is also very subjective. The criterion of quality is very uncertain. Quantity is easier to administer, since it is more certain that a substantial investment has been made if a large amount of data has been collected.¹²⁷

***IIC 29** The consequence of this interpretation of the term "qualitatively" is that a database could be constituted by two new business ideas or two famous paintings only, since these could represent a qualitatively substantial investment.¹²⁸ Since an investment can consist in the sole presentation of ideas or know-how, divulging these ideas or know-how exclusively in a database could lock them up completely, as extracting one of them could be extracting a qualitatively substantial part.¹²⁹ They would not exist in the public domain since they were created or invented but not collected. The consequences are far-reaching. The question is therefore whether the Directive's framers intended such consequences on the basis of the term "qualitative", and whatever they intended, as a matter of policy, whether such protection should be possible. It seems that, although the definition of a database is broad,¹³⁰ the Directive's draftsmen did not intend to target the protection of (business) ideas or know-how but rather of information. The Directive speaks of the information market, information products and information storage and processing systems (recitals 3, 9, 10, 47). Of course, in the broadest possible sense, ideas and know-how are also information. But this sense is surely not the sense of information as used in these recitals. Additionally, as a matter of sound intellectual property policy, single ideas and single pieces of know-how should not be protected (if they do not achieve patentability standards). It does not prevent them from being protected by confidentiality agreements. But granting potentially perpetual¹³¹ protection to ideas goes too far, especially if only a low level of protection is required. In conclusion, the qualitative criterion is uncertain and, when interpreted broadly, too far-reaching.

A few courts have granted protection to databases on the basis of a qualitatively substantial investment. Two of them have just stated that there was a qualitative investment but have not explained their findings any further; they are therefore not of interest here.¹³² Two other cases are more interesting. In the very first (reported) case to decide on protection on the basis of qualitative investment, the court recognised that "an investment that evidences a long-term entrepreneurial activity, a prominent place in the respective market and a solid reputation in the particular trade is a qualitatively substantial investment".¹³³ Seemingly, such application of the criterion allows for relatively easy protection. The first French court to assess a substantial investment in terms of quality asserted that there was a qualitatively substantial investment in presenting the data.¹³⁴ The claimant argued that its investment was qualitatively substantial since it had made promotion efforts, and had digitised and classified the data in order to make the database more valuable and more easily exploitable. It also argued that the presentation of its database on a web site is effective, aesthetic and ergonomic. These two cases show that a qualitatively substantial investment can subsist and not coincide with the originality requirement. If the qualitative assessment of the substantial investment requirement is limited to some of these factors (making promotion efforts, or rendering a database more user-friendly or effective), it is not dangerous. But if it is extended to the interpretation described above of the second group of commentators, it is not advisable. For this reason, it is advisable to restrict its meaning as suggested.

Conclusion

The following conclusions can be drawn simply by interpreting the Directive's text and its recitals. An investment should be broadly defined. It can be an effort in time, energy or money. It can be human, material or financial. There is no reason to discriminate between types of investment as long as they fulfil the requirement of substantiality.

Quality is a very vague criterion with more disadvantages than advantages. A substantial investment can be human, material or financial. Such investment can accrue alternatively through three different actions (obtaining, verifying or presenting the elements). Through these two already broad criteria, it is relatively easy to obtain *sui generis* protection. It is therefore recommended to interpret the meaning of "qualitative" as restrictively as possible.

The threshold of substantiality should be set at a low level for the reasons developed above. As in copyright law, the concept of substantial investment is impressionistic. As in copyright law, where what can only be stated with certainty is that the more detailed an idea is, the closer it will be to an expression, for the *sui generis* right, the more time, energy and money that is spent on collecting, verifying or presenting a database's elements, the better the investment's chances of becoming substantial and the greater the possibility of protection. To adapt the metaphor used by Lord Hoffmann in *Designers Guild*,¹³⁵ the *sui generis* right protects ants better than cicadas.¹³⁶

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1. Directive 96/9/EC of the Council and the Parliament on the legal protection of databases of 11 March 1996, OJ, L 77/20, 27 March 1996.
2. The amount of decisions varies from country to country. The most flourishing jurisdictions are the Netherlands, Germany and France.
3. See for a general account, P.B. HUGENHOLTZ, "The new database right: early case law from Europe", Paper presented at the 9th Annual Conference on International Intellectual Property Law and Policy, University of Fordham, 19-20 April 2001 and the web site maintained by the IVIR <http://www.ivir.nl/files/database/index.html>; S. HAGEN, "Databankenrechtelijke substantialiteit", 2002 *Intellectuele Eigendom & Reclamerecht* 6; for partial accounts, see J. GASTER, "European *sui generis* right for databases: legal protection of chronological lists of football matches and compilations of data related to horseracing under database right -- or how your judge might get it right or wrong", 2001 *CRI* 74; W. GROSHEIDE, "Database protection, the European way", 8 *Wash. U.J.L. & Pol'y* 39-74 (2002); G. KARNELL, "The European *sui generis* protection of data bases: Nordic and U.K. law approaching the court of the European Communities -- some comparative reflections", 2002 *J. Copyright Soc. of the USA* 983-1002; M. LEISTNER, "The legal protection of telephone directories relating to the new database maker's right", 31 *IIC* 950-967 (2000); M. LEISTNER, "Legal Protection for the Database Maker -- Initial Experience from a German Point of View", 33 *IIC* 439 (2002); D. VISSER, "The database right and the spin-off theory", in: H. SNIJDERS & S. WEATHERILL (eds.), "E-commerce law" 105-110 (Kluwer, 2003); P.B. HUGENHOLTZ, "Program Schedules, Event Data and Telephone Subscriber Listings under the Database Directive -- The 'Spin-Off' Doctrine in the Netherlands and elsewhere in Europe", Paper presented at 11th Annual Conference on International Intellectual Property Law & Policy, Fordham University School of Law, New York, 24-25 April 2003.
4. M. LEISTNER, *supra* note 3, at 957; T. SANKS, "Database Protection: National And International Attempts To Provide Legal Protection For Databases", 25 *Fla.St. U.L.Rev.* 991, 998 (1998); N. MALLET-POUJOL, "La directive concernant la protection juridique des bases de données: la gageure de la protection privative", 1 *DIT* 9 (1996); N. MALLET-POUJOL, "Protection des bases de données", [2003] *Ed. Juris-classeur*, No. 8, 6080, at 12 ("the vague and subjective character of the concept renders the answers necessarily uncertain and casuistic"); F. POLLAUD-DULIAN, "Brèves remarques sur la directive du 11 mars 1996 concernant la protection juridique des bases de données", 18 *Dalloz Affaires* 539, 540 (1996); N. THAKUR, "Database protection in the European Union and the United States: the European Database Directive as an optimum global model?", (2001) *IPQ* 128; Y. JOMOUTON & J. LAFFINEUR, "La protection juridique des bases de données et son impact sur le consommateur", 42 *Consumentenrecht* 14 and 21 (1999); M. BUYDENS, "Le projet de loi transposant en droit belge la directive européenne du 11 mars 1996 concernant la protection juridique des bases de données", 1996 *A & M* 347; P. GAUDRAT, "Loi de transposition de la directive 96/9 du 11 mars 1996 sur les bases de données: le champ de la protection par le droit *sui generis*", 52 (1) *RTD Com.* 101 (1999).
5. P. B. HUGENHOLTZ, "De databankrichtlijn eindelijk aanvaard: een zeer kritisch commentaar", 1996 *Computerrecht* 131; J. REICHMAN & P. SAMUELSON, "Intellectual property rights in data?", 50 *Vand. L. Rev.* 51 (1997);

MALLET-POUJOL, *supra* note 4.

6. As shall be seen, the Directive does not define the term "substantial investment" and does not set the level at which a substantial investment will occur, but only gives indicators as to how it has to be judged.
7. The Cambridge Dictionaries Online (<http://dictionary.cambridge.org/>) defines the verb to invest as "to put money, effort, time etc. into something to make a profit or get an advantage". Another dictionary states: "the act of investing; laying out money or capital in an enterprise with the expectation of profit". See WordNet @ 1.6, © 1997 Princeton University; available at <http://dictionary.reference.com>; The Merriam Webster Online Dictionary (<http://www.merriam-webster.com/cgi-bin/dictionary>) defines investment as "the outlay of money usually for income or profit".
8. GAUDRAT, *supra* note 4, at 100.
9. *Ibid.*
10. Recital 40: "... whereas such investment may consist in the deployment of financial resources and/or the expending of time, effort and energy".
11. These were the terms used by French lawmakers when implementing the Directive (Art. L 341-1 of the Intellectual Property Code). The Directive uses the term "technical", but "material" and "technical" could amount to the same thing, *i.e.* equipment, even if "technical" is more specific than "material".
12. GAUDRAT, *supra* note 4, at 100.
13. LUCAS, "Traité de la Propriété Littéraire et Artistique" 637, No. 817-4 (Litec, Paris 2001), citing GAUDRAT, *supra* note 4, at 97.
14. Gaudrat, *supra* note 4, at 100. See also JOMOUTON & LAFFINEUR, *supra* note 4, at 1: the criterion of substantial investment only authorises the judge to limit his appreciation to the numeral amount of investments. The latter authors also wonder how investments can be other than financial (*ibid.*, at 21).
15. See Court of First Instance ("CFI"), 16 March 1999, 1999 Journal des Tribunaux 306 (*Union Nationale des Mutualités Socialistes v. Belfarma Communication*); Munich District Court, 8 August 2002, available at <http://www.jurpc.de/rechtspr/20020369.htm> (*Übernahme einer Gesetzssammlung im Internet*); Paris CFI, 22 June 1999, PIBD, 1999, No. 686, III-494 (*Groupe Miller Freeman v. Tigest*); Paris Court of Appeals ("CA"), 12 September 2001, Légipresse, No. 187, Dec. 2001, at 215-225; 2001 D. No. 35, at 2895; 2002 JCP No. 1, at 25-31, comment by POLLAUD-DULLIAN; 2002 PIBD No. 740, III-198-201 (*Tigest v. Reed Expositions France et Salons Français et Internationaux SAFI*), confirming the judgment in full; *British Horseracing Board v. William Hill*, 2001 RPC 612; Brussels CFI, 18 January 2001, 2002 Revue Ubiquité 95 (*Spot v. Canal Numedia*).
16. See, *e.g.*, *Tigest v. Reed Expositions France*, *supra* note 15; *British Horseracing Board v. William Hill*, *supra* note 15; *Groupe Miller Freeman v. Tigest*, *supra* note 15; *Spot v. Canal Numedia*, *supra* note 15.
17. *UNMS v. Belfarma*, *supra* note 15 (10 years); *Übernahme einer Gesetzssammlung im Internet*, *supra* note 15.
18. Nanterre Com. Court, 16 May 2000, Gaz. Pal., Oct. 2000, No. 301, Jurisp., at 38, comment by I. MATTHYSSENS; 2000 Communication Commerce Electronique 13, comment by C. CARON; JCP Entreprise et Affaires, 3 January 2002, No. 5, at 222, comment by F. GABLIN (*PR Line v. Newsinvest*); Versailles CA, 12th chamber, 11 April 2002, 2002 Communication Commerce Electronique 20-22, comment by CARON (*Newsinvest v. PR Line*); see also indirectly, Paris CFI, 3rd chamber, 2nd sect., 25 April 2003, 2003 D. 2819 *et seq.*, comment by LE STANC, available at www.legalis.net (*Sonacotra v. Syndicat Sud Sonacotra*).
19. E. DERCLAYE, "What is a database? A critical analysis of the definition of a database in the European Database Directive and suggestions for an international definition", 6 Journal of World Intellectual Property 981 *et seq.* (2002) and the references cited. See also M. VIVANT, "Recueils, bases, banques de données, compilations, collections ... l'introuvable notion?", 1995 Dalloz Chron. 197, cited by F. POLLAUD-DULLIAN, *supra* note 4, at 540, who argues that the framers wanted to avoid cumulation of sound recording copyright and database rights.
20. This recital states: "... whereas this means that a recording or an audiovisual, cinematographic, literary or musical work as such does not fall within the scope of this Directive".
21. See also G. WESTKAMP, "Protecting Databases Under US and European Law -- Methodical Approaches to the Protection of Investments Between Unfair Competition and Intellectual Property Concepts", 34 IIC 772, 782 (2003).
22. Although this question should not arise, since these compilations should not be databases in the first place; see *supra* note 19.
23. As HUGENHOLTZ, *supra* note 5, at 134, states, the Directive does not say how much the database maker must "sweat over" his compilation.
24. S. GIJRATH & B. GORISSEN, "Applying the database act to online information services. A trial and error exercise", 2000 CW (No. 1) 25, 27; H. VANHEES, "De juridische bescherming van databanken", 30 Rechtskundig Weekblad 1001, 1003 (1999).

25. M. POWELL, "The European Union's Database Directive: An International Antidote to the Side Effects of Feist", 20 *Fordham Int'l L.J.* 1215, 1238 (1997); N. MALLET-POUJOL, *supra* note 4, at 12.
26. M. LEISTNER, *supra* note 3, at 957; SANKS, *supra* note 4, at 998; MALLET-POUJOL, *supra* note 4, at 9, 12; POLLAUD-DULIAN, *supra* note 4, at 540; THAKUR, *supra* note 4, at 128; JOMOUTON & LAFFINEUR, *supra* note 4, at 14 and 21, who however agree that originality is also a criterion of variable geometry (citing A. STROWEL, "L'originalité en droit d'auteur: un critère à géométrie variable", 1991 *Journal des Tribunaux* 513-518). They also note, however, that at least with respect to authors' rights, the judges have the possibility to assess originality in relation to what existed before in the "prior art"; BUYDENS, *supra* note 4, at 347, who argues that the criterion is not well defined; GAUDRAT, *supra* note 4, at 101, who states that it is difficult to predict what the requirement of substantial investment covers.
27. MALLET-POUJOL, *supra* note 4, at 9.
28. J.-P. TRIAILLE, "La protection des logiciels et des bases de données -- un premier bilan?", in: BRUYLANT, "Droits intellectuels: A la rencontre d'une stratégie pour l'entreprise" 460 (CUP (Commission droit et vie des affaires), Brussels 2002).
29. A. STROWEL & E. DERCLAYE, "Droit d'auteur et numérique: logiciels, bases de données et multimédia, droit beige, européen et compare" 29 (2001).
30. BUYDENS, *supra* note 4, at 347.
31. STROWEL & DERCLAYE, *supra* note 29, No. 358.
32. M. LEISTNER, *supra* note 3, at 449.
33. POLLAUD-DULIAN, *supra* note 4, at 542.
34. J. GASTER, "Der Rechtsschutz von Datenbanken", note 476 (1999); BERGER, 1997 *GRUR* 169, 173; M. LEHMANN, 29 *IIC* 776, 783 (1998); and M. LEISTNER, "Der Rechtsschutz von Datenbanken im deutschen und europäischen Recht, Eine Untersuchung zur Richtlinie 96/9/EG und zu ihrer Umsetzung in das deutsche Urheberrechtsgesetz" 162 *et seq.* (2000).
35. GROSHEIDE, *supra* note 3, at 63.
36. HAGEN, *supra* note 3, at 7.
37. LEISTNER, *supra* note 3, at 452.
38. LEISTNER, *supra* note 3, at 449 *et seq.*
39. LEISTNER, *supra* note 3, at 450.
40. LEISTNER, *supra* note 3, at 958 and *supra* note 3, at 451.
41. LEISTNER, *supra* note 3, at 958.
42. *Cantor Fitzgerald International v. Traditional Ltd*, 2000 *RPC* 95.
43. See *supra* note 15.
44. Para 23: copyright and the sui generis right "may have concepts in common but if so that is only because the concepts happen to fit both, not because database is a species of copyright". The court then continues: "courts should be wary of applying copyright principles automatically to the sui generis right. The new right must be interpreted in light of the Directive and preparatory texts".
45. LEISTNER, *supra* note 3, at 958 (note 21).
46. *Ibid.*
47. H. LADDIE, P. PRESCOTT, M. VITORIA, A. SPECK & L. LANE, "The Modern Law of Copyright and Designs" 1076 (No. 30.47) (3rd ed., 2000); G. WESTKAMP, "EU database protection for information uses under an intellectual property scheme: Has the time arrived for a flexible assessment of the European database Directive?", Paper presented at the 11th Annual Conference on International Intellectual Property Law & Policy, Fordham University School of Law, New York, 24-25 April 2003, at 7-8; G. WESTKAMP, *supra* note 21, at 781; NORDEMANN & HERTIN, Sec. 87a, note 10.
48. LEISTNER, *supra* note 3, at 449.
49. P. TORREMANS, "Holyoak and Torremans Intellectual Property Law" 538 (3rd ed., 2001).
50. LEISTNER, *supra* note 3, at 449 citing NORDEMANN & HERTIN, Sec. 87a, note 10.
51. WESTKAMP, *supra* note 47, at 7-8.

52. WESTKAMP, *supra* note 21, at 783.
53. WESTKAMP, *supra* note 21, at 782.
54. Com. Court of Paris, 18 June 1999, 1999 DIT No. 4, at 57; 2000 D. Jurisp., at 105, and comment by D. GOLDSTEIN; 1999 Expertises 398, comment by A. BRÜNING.
55. German Supreme Court, 6 May 1999, I ZR 199/96, at 16 *et seq.*
56. *Übernahme einer Gesetzsammlung im Internet*, *supra* note 15.
57. *See supra* note 15.
58. Para. 6 of the judgment.
59. *Ibid.*
60. Para. 32 of the judgment.
61. Paris CA, 4th chamber, sec. B., Jurisdata, No. 223155.
62. Paris CFI, 3rd chamber, 5 September 2001, Légipresse, No. 187, Dec. 2001, at 219-221, and comment by L. TELLIER-LONIEWSKI.
63. *See supra* note 15.
64. Comment on *GMF v. Tigest*, L. TELLIER-LONIEWSKI, *supra* note 61.
65. Comment on *GMF v. Tigest*, POLLAUD-DULIAN, JCP, No. 1, 2 January 2002, at 27 *et seq.*
66. Paris CFI, 31 January 2001, available at www.legalis.net (*Groupe Miller Freeman v. Neptune Verlag*).
67. Paris CA, 20 March 2002, PIBD, No. 746, 2002, at III-331-334 (*Construct Data Verlag v. Reed Expositions France*).
68. *UNMS v. Belpharma*, *supra* note 15.
69. In *UNMS v. Belpharma* no mention is made of the use of computers.
70. *See supra* note 15.
71. Paris CFI, 11 June 2003, unreported, on file with the author.
72. *See supra* note 18.
73. Comment by Caron, 2000 Communication Commerce Electronique 13.
74. *See supra* note 18.
75. The typing in of 1,650 addresses at a reasonable rate of one minute per address represents only 27.5 hours of work.
76. Berlin District Court, 8 October 1998, 16 O 448/98, 1998 AfP 649-651; and Cologne District Court, 2 December 1998, 28 O 431/98, 1999 AfP 96 (*Urheberrechtsverstoß durch Internet-Suchdienst*).
77. *See* Berlin District Court, *supra* note 76.
78. *See Urheberrechtsverstoß durch Internet-Suchdienst*, *supra* note 76.
79. CARON, 2002 Communication Commerce Electronique 20-22, commenting on the *PR Line* decision.
80. *Ibid.*
81. Paris Com. Court, 16 February 2001, cited by CARON, *supra* note 79.
82. Paris CA, 18 June 1999, 2000 RIDA (No. 183) 316; 1999 Expertises 390, and comment by GALLOT-LE LORIER & VARET.
83. *See supra* section 1.
84. *See Tigest v. Reed Expositions France*, *supra* note 15 and MALLET-POUJOL, *supra* note 4, at 12-13.
85. *See* MALLET-POUJOL, *supra* note 4, at 12-13.
86. *Datenbankeigenschaft von Hyperlinksammlungen*, available at <http://www.jurpc.de/rechtspr/20020082.htm>.

- [87.](#) NORDEMANN & HERTIN, Sec. 87a, point 9; Cologne District Court, 2000 Computer und Recht 400.
- [88.](#) Translation by the author.
- [89.](#) The court refers to GLEISNER, 1999 GRUR 831; KINDLER, 2000 K&R 271; KÖHLER, 1999 ZUM 554.
- [90.](#) Cologne District Court, 25 August 1999, available at http://www.netlaw.de/urteile/lgk_14.htm.
- [91.](#) See also HAGEN, *supra* note 3, at 10.
- [92.](#) WESTKAMP, *supra* note 21, at 782.
- [93.](#) See this argument retained by the Rostock court in *Datenbankeigenschaft von Hyperlinksammlungen*, *supra* note 86.
- [94.](#) See also recitals 45 and 46 of the Directive.
- [95.](#) We deliberately leave out the argument that there can be an investment in presenting data that has been created and not collected. In such cases, there can be a monopoly since the data is not available elsewhere. The spin-off theory or doctrine addresses this issue and in summary advocates the non-protection of such databases. This theory states in substance that elements that are mere by-products of another (primary) activity will not reflect the substantial investment directed towards the production of the database. The idea behind the doctrine is that, even if some data can be said to fulfil the requirement of being collected, verified or presented, they are by-products of another main activity through which the database owner has already recouped its investment. The whole debate surrounding the application of the spin-off theory deserves an article in itself. The author has discussed the spin-off theory in an article that addresses the rare cases of monopolisation of information. See E. DERCLAYE, "Database Sui Generis Right: Should We Adopt the Spin-Off Theory?", (2004) EIPR 402. On the spin-off theory, see HUGENHOLTZ & VISSER, *supra* note 3.
- [96.](#) This means that this compulsory licence (letting the visitors film or take pictures) should exist in any case at the very least when the museum does not itself sell reproductions of the works at a reasonable price.
- [97.](#) I. STAMATOUDI, "The EU database directive: Reconceptualising copyright and retracing the future of the *sui generis* right", 50 Hellenic Review of International Law 435, 469 (1997).
- [98.](#) STAMATOUDI, *supra* note 97, at 469.
- [99.](#) STAMATOUDI, *supra* note 97, at 468 reporting some commentators' opinions.
- [100.](#) See STROWEL, *supra* note 26. We do not purport to apply all copyright principles in one lump to the *sui generis* right, but just compare the requirement of substantial investment with the requirement of originality. It appears to us that a strong analogy can be made between the two.
- [101.](#) The requirement of originality is an example (both in continental Europe and the United Kingdom); the substantial part criterion of infringement in UK law is another.
- [102.](#) LEISTNER, *supra* note 3, at 957; HAGEN, *supra* note 3, at 8.
- [103.](#) THAKUR, *supra* note 4, at 128.
- [104.](#) See, e.g., in British law, *Designer's Guild Ltd v. Russell Williams (Textiles) Ltd* [2000] FSR 121 (CA); [2001] FSR 11 (House of Lords).
- [105.](#) "Upon any work ... a great number of patterns of increasing generality will fit equally well, as more and more of the incident is left out. The last may perhaps be no more than the most general statement of what the work is about, and at times might consist only of its title; but there is a point in this series of abstractions where they are no longer protected, since otherwise the playwright could prevent the use of his "ideas", to which, apart from their expressions, his property is never extended. Nobody has ever been able to fix that boundary, and nobody ever can." (*Per J. Learned Hand in Nichols v. Universal Pictures Corp.*, 45 F. 2d 119, at 121 (2nd Cir. 1930)).
- [106.](#) D. GOLDSTEIN, 2000 D. No. 5, at 107 *et seq.* commenting on the *France Telecom v. MA Editions* case.
- [107.](#) F. GABLIN, 2002 JCP Entreprise et affaires (No.5) 222.
- [108.](#) V. BENSINGER, "Sui generis Schutz für Datenbanken, Die EG-Datenbank Richtlinie vor dem Hintergrund des nordischen Rechts" 111 *et seq.* (1999); P. GAUDRAT, "Loi de transposition de la directive 96/9 du 11 mars 1996 sur les bases de données: les caractères du droit *sui generis*", 52 (2) RTD Com. 417 (1999); M. LE TOURNEAU, "Folles idées sur les idées", 2001 Communication Commerce Electronique, Chron. (No. 4) 12. An analysis of whether the *sui generis* right should be interpreted by analogy to unfair competition rules or copyright principles is beyond the scope of this article. This question relates to the determination of the legal nature of the *sui generis* right. It might be that since the right can be said to be inspired in form by copyright and in content by unfair competition law, principles of both sets of rules can be used to interpret it, depending on the provision in question. This should, however, always be done with extreme caution, since the right is by definition *sui generis* and uses completely new concepts for which the Directive generally provides guidance.

- [109.](#) HAGEN, *supra* note 3, at 8, believes that the concept of substantial investment is a Community concept.
- [110.](#) References for preliminary rulings have been made to the ECJ in four cases: by the Monomeles Protodikio Athinon by order of that Court of 11 July 2002 in the case of *Fixtures Marketing Limited v. Organismos Prognostikon Agonon Podosphairou AE* (case C-444/02, OJ C 31/12, 8 February 2003), by the Vantaan Käräjätöikeus by order of that Court of 1 February 2002 in the case of *Fixtures Marketing Ltd v. Oy Veikkaus Ab* (case C-46/02, OJ C 109/27, 1 May 2002), by the Swedish Supreme Court by order of 10 September 2002 in *Fixtures Marketing Ltd v. AB Svenska Spel* (case C-337/02, OJ C 274/23, 9 November 2002) and by the Court of Appeals (England and Wales) (Civil Division) by order dated 24 May 2002 in the case of the *British Horseracing Board, the Jockey Club and Weatherbys Group Ltd v. William Hill Organisation Ltd* (case C-203/02, OJ C 180/14, 27 July 2002). The courts ask questions relating to concepts such as “database”, “substantial part evaluated qualitatively or quantitatively”, “obtaining”, “repeated and systematic extraction or reutilisation”, “normal exploitation” and “unreasonable prejudice”. The decision was handed down on 9 November 2004, when this article was in its final editing stages. The decision is available at www.curia.eu.int.
- [111.](#) SANKS, *supra* note 4, at 998.
- [112.](#) STAMATOUDI, *supra* note 97, at 468.
- [113.](#) For some, the fact that a database represents a great economic value does not make the *sui generis* right arise (see HUGENHOLTZ, *supra* note 5, at 134). Indeed the database can have such great value but not have required a substantial investment, evaluated quantitatively or qualitatively.
- [114.](#) HUGENHOLTZ, *supra* note 5, at 134.
- [115.](#) C. DOUTRELEPONT, “Le nouveau droit exclusif du producteur de bases de données consacré par la directive européenne 96/9/C du 11 mars 1996: un droit sur l’information?”, in: “Mélanges en hommage à M. Waelbroek” 903, 909 (2002).
- [116.](#) M. DAVISON, “*Sui generis* protection of databases” 97 *et seq.* (Thesis, Faculty of Law, Monash University, Melbourne 2001) (on file with the author). See also *ibid.*, “The legal protection of databases” (Cambridge University Press, 2003); C. RETORNAZ, “La position commune arrêtée par le Conseil, le 10 juillet 1995, sur la protection juridique des bases de données”, 77 *Lamy Droit de l’Informatique* 15 (1996).
- [117.](#) HUGENHOLTZ, *supra* note 5, at 134.
- [118.](#) RETORNAZ, *supra* note 116, at 15.
- [119.](#) DAVISON, *supra* note 116, at 97.
- [120.](#) DAVISON, *supra* note 116, at 97.
- [121.](#) DAVISON, *supra* note 116, at 97.
- [122.](#) LEISTNER, *supra* note 3, at 448.
- [123.](#) WESTKAMP, *supra* note 47, at 21.
- [124.](#) P. RAUE & V. BENSINGER, “Implementation of the *sui generis* right in databases pursuant to Sec. 87 *et seq.* of the German Copyright Act”, [1998] 3 *Comms. Law* 6, at 221. See also P.B. HUGENHOLTZ, “Implementing the European Database Directive”, in: “Intellectual Property and information law. Essays in honour of H. Cohen Jehoram”, 1998 *Information Law Series* 190, who suggests that “a qualitative investment may result from the expertise of a professional, e.g. a lexicographer selecting the key words for a dictionary”. In a previous article (HUGENHOLTZ, *supra* note 5, at 134), the same author referred to the *Van Dale v. Romme* case (1991 *Computerrecht* 84) where the expert selection of words by graduate lexicographers was not original enough to confer copyright protection.
- [125.](#) HUGENHOLTZ, *supra* note 5, at 134.
- [126.](#) GAUDRAT, *supra* note 4, at 101.
- [127.](#) HAGEN, *supra* note 3, at 12, also points out that the criterion of quantity is easier to understand and to prove.
- [128.](#) On the fact that a database can be composed of only two elements, see E. DERCLAYE, *supra* note 19.
- [129.](#) The spin-off theory (for an explanation see *supra* note 95) would seemingly not apply in these cases because the ideas or know-how are the main activity themselves and not by-products of the main activity.
- [130.](#) See E. DERCLAYE, *supra* note 19.
- [131.](#) See Art. 10(3) of the Directive which allows the renewal of protection if a change resulting in a new substantial investment is made in the database.
- [132.](#) *Datenbankeigenschaft von Hyperlinksammlungen*, *supra* note 86. In *Kidnet* (*supra* note 90) the court holds that there is a qualitative investment in the verification of the database.

- [133.](#) Frankfurt District Court, 19 February 1997, 1997 Computer und Recht 740, cited by GROSHEIDE, *supra* note 3 at 63.
- [134.](#) *Cadremploi v. Keljob*, *supra* note 62.
- [135.](#) See *supra* note 104, at 122, para. 26, of the House of Lords' judgment where Lord Hoffmann compares ideas with hedgehogs and expressions with foxes.
- [136.](#) See J. DE LA FONTAINE, "The cicada and the ant", in Book I, in: "Les Fables Choisies" (1668).

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