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(54) **A METHOD FOR APPLYING FIGURES, DRAWINGS, PATTERNS, REPRESENTATIONS,
IMAGES OR THE LIKE ON A CARRIER**

(57) Working method for applying patterns, images or pictures on a support that contains at least the steps of putting a watery solution on the surface; and to manipulate the watery solution or the surface with a gas jet.

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Description

[0001] The current invention is first and foremost related to the *modus operandi* of applying figures, drawings, patterns, images, pictures or the like to a painting support.

[0002] Without restricting the invention to the descriptions that follow, the current invention is more specifically related to a working method that is meant to create decorative elements, paintings or works of art and the like.

[0003] The working method of the invention can be considered as a new painting technique that paves the path for numerous new possibilities such as realising new effects that in many ways are also more efficient than the already existing techniques that are applied in the visual arts.

[0004] The support here is a sheet of paper, but the supports that are made of other materials such as wood, cardboard, textiles or canvas and so on may also qualify as supports when applying the techniques of the invention.

[0005] The working methods consistent with the invention offer in particular alternative or complementary possibilities for painting techniques whereby colour is added to a support by means of water solutions, e.g. water or aquarelle paint, ink, ecoline.

[0006] The current invention relates to a technique of applying figures, drawings, patterns, images, pictures and so on, on a support whereby the technique should contain the following two steps:

- putting a watery solution on the surface whereby the watery solution contains one or more substances with colour such as ink, pigment, aquarelle paint, ecoline, and so on; and,
- manipulating the watery solution with a gas jet.

[0007] An important advantage of a technique peculiar to the invention is that in the course of making a painting, a decoration or in general an image, one can make use of a gas jet, by which chemical reactions or physical processes take place, such as oxidation reactions, decomposition reactions, crystallisations and so on.

[0008] The gas jet indeed allows the user to add energy in the form of heat, whereby chemical reactions or physical processes can take place when enough energy is absorbed, something which is impossible with the traditional techniques that are known and applied up to now.

[0009] In the course of such chemical reactions or physical processes new forms, colours and reflections can be created, by means of which the artist is given new possibilities to create a certain atmosphere or to arouse certain feelings in the observer.

[0010] An extra advantage related to the application of the technique in line with the invention of using a gas jet, is that when using a gas jet one can target the object perfectly, as the gas jet can be directed with the utmost precision towards the chosen spot, as small as this one may be and as such the gas jet enables its user to put

heat on a limited part of the surface of the support, resulting in the possibility of getting a certain pictorial control.

[0011] As such it becomes possible to replace the traditional brush that is used for painting, by a gas jet or to use a gas jet as an additional tool or device together with traditional equipment for creating paintings, images, patterns, and so on.

[0012] Other methods to bring energy or rather heat to the support are not necessarily shut out from the invention, but according to the findings of the inventor the use of a gas jet is the most efficient tool, the best one at targeting and the simplest one to use.

[0013] According to one possible working method, in line with the invention, a traditional gas jet is used which for the process of combustion takes oxygen from the air around.

[0014] Depending on the nozzles that are fixed on it, that kind of gas jet usually has different temperature ranges.

[0015] Some nozzles are very thin and reach a temperature of (just) 500°C. These nozzles are very well suited for detailed work.

[0016] Other nozzles can reach much higher temperatures but they are less sophisticated.

[0017] These bigger nozzles, then, have the advantage that they can instantly cover big parts at once and that they can bring more uniformity.

[0018] The best gas jet type is one supplied with a series of different nozzles.

[0019] With the traditional gas jets which extract oxygen from the ambient air one can reach temperatures up to 1600°C.

[0020] Another working method in line with the invention is one where the gas jet is equipped with extra oxygen supplies with which an operating temperature range up to 3600°C can be reached.

[0021] In order to move over the surface easily, the gas jet can be provided with a manoeuvrable hose pipe for supplying gas or the gas jet can be pistol shaped and is then easy to handle.

[0022] According to a selected method of application in line with the invention, first water is being put on the support, then this water is being heated with the gas jet; a watery substance is formed by adding one or more substances with colour such as ink, pigment, aquarelle paint, ecoline, and so on.

[0023] With this first selected working method, in line with the invention, effects can be obtained which are not attainable with the classical techniques.

[0024] Indeed, by heating the water on the support, the molecules start to move faster.

[0025] When in the next step a colour substance such as water colour, ink, pigment, ecoline, varnish and so on, is added to the heated water, the molecules of the corresponding colours are diverted in different directions by the water molecules, with the effect that a sort of chaos originates which is perceived as something very natural

and genuine and which at the same time induces a special suggestion of movement resulting in the creation of a very high energetical atmosphere.

[0026] By making use of polar substances the targeted effect is spectacular.

[0027] The addition of colouring or polar substances can be done with a normal paintbrush, but here the preferred option is to use a pipet or an injection needle because the water molecules should not be disturbed so that the effects in the final result look natural and genuine.

[0028] The surface selected here is a sheet of paper which has been "stretched".

[0029] "Stretching" is a frequently used technique in the visual arts.

[0030] It is a technique whereby the support -in this case a sheet of paper- is soaked in water whereby the paper swells.

[0031] The surface then is attached to a board or to another kind of rigid support that is made especially for stretching.

[0032] When letting the surface dry, the paper will shrink again and as such it will be subjected to a certain strain or pressure.

[0033] The advantage of such a stretched surface is that a significant amount of water or watery solution can be put on the paper without deforming it.

[0034] Another selected technique, in line with the invention, consists of putting a watery solution composed of water and one or more coloured substances such as ink, pigment, watercolour, varnish, ecoline and so on, on the support. Then this watery solution is heated by using the gas jet.

[0035] Prior to start applying this technique, in line with the invention, the paper or the support is being stretched and dried as pleased.

[0036] It goes without saying that this technique, in line with the invention, results in creating other effects than in the previous technique, but when working with this technique we can, with regard to the final result, observe a similar energetical atmosphere as when working with the first selected technique.

[0037] After heating the water of the watery solution conform the methods described above, the part of the painting that has been manipulated on the surface, can be viewed as finished as well as it can be viewed as unfinished and open for further gas jet operations.

[0038] Another technique that can be applied, in line with the invention, is to put a watery solution containing at least one coloured substance on the surface and to let the gas jet use its propulsive force to divert parts of that watery solution in whatever direction one wants.

[0039] Using this technique, in line with the invention, indeed makes it possible to draw, draft and paint on a surface with the gas jet torpedoing the coloured substances into the water.

[0040] It is clear that the technique of using a gas jet, in line with the invention, can be applied for drawing and painting, and this independently of whether other oper-

ations have preceded the actual use of the gas jet as described above.

[0041] The effects which appear to be energetical and which have been obtained in the step described above are not being disturbed, something that would not have been the case if we had used a normal brush.

[0042] As to the described techniques, we should keep in mind that the concentration of the colouring substance like e.g. pigment and the like in the water, is an important factor.

[0043] If there is too much water in a watery solution, the patterns and structures that have been obtained by adding heat to them with the gas jet cannot be kept intact long enough as the water cannot dry quickly enough to fix the patterns and structures on the support.

[0044] If there is too little water in a watery solution or if in other words the concentration of a colouring substance in the watery solution is too high, the support can be burned or the watery solution can be dried up before the painting is finished.

[0045] In that case it is eventually possible to add extra water.

[0046] It is clear that the concentration of a colouring substance in the watery solution suitable to this technique, may vary in function of the selected colouring substances, something which may depend on the artist's experience and/or by the sensitivity of the artist.

[0047] With regard to yet another technique, in line with the invention, the watery solution on the surface is being heated in such a way that in the water of the watery solution small bubbles appear.

[0048] This technique offers the possibility to generate new patterns or structures on the surface, and here again the artist has another new technique at his disposal.

[0049] Additionally the paper, or another surface, can be stretched, for example in order to hold the paper flat when it is being painted upon.

[0050] Then a watery solution composed of a mixture of water and one or more colouring substances is put on the surface, with the help of brushes, injection needles, pipettes and so on.

[0051] Finally the watery solution is heated on the spot or the area on the surface where bubbles are requested.

[0052] Applications with the gas jet for other actions than creating bubbles are not excluded from the invention.

[0053] In case the watery solution dries too quickly, then an amount of water or watery solution can be added with e.g. an injection needle or a pipette.

[0054] With yet another selected method of implementing the technique, in line with the invention, a watery solution containing water and one or more colouring substances such as for example pigment, is put on the surface and then the watery solution is heated with the gas jet whereby, in the course of this heating, water is being evaporated and whereby one or more colouring substances are clotting together to form a film on the water or a crust on the surface.

[0055] The colouring substances typically consist of heavier substances and as such their clotting together and their drying up are accelerated while the water is evaporating.

[0056] By doing so new structures, patterns, forms or figures can be obtained on the support, something which can only be realised by applying this technique, in line with the invention.

[0057] With yet another selected method of implementation, in line with the invention, a next step can be taken: the film and/or the crust we mentioned can be fractured so that other forms and structures can be created.

[0058] A very special technique, in line with the invention, consists of adding an extra substance with colour to the watery solution underneath the film with an injection needle before that film fractures.

[0059] When then the film on the watery solution is fractured, the added coloured substance will emerge through fractures in the film.

[0060] An additional manipulation with the gas jet can be introduced to induce encrustation of the added substance with colour.

[0061] This manipulation can be repeated several times resulting in a stratification of cursts without having to let the different layers dry separately.

[0062] With yet another selected working method, in line with the invention, a watery solution consisting of a mixture of water and one or more substances with colour like ink, pigment, watercolour, ecoline and so on, is put on the surface whereby a pattern, a picture or an image is formed; then the watery solution must dry very well and finally the gas jet is manipulated in such a way that the flame is being moved upon parts of the surface mattifying the colours without changing the picture or figure of the pattern, the image or the illustration.

[0063] When doing so the flame of the gas jet is moving over the surface as a result of manipulating the gas jet in a gentle stroking movement.

[0064] By mattifying colours in certain areas of the surface, with this technique, other colours on the surface may be enhanced and other colours may seemingly be intensified.

[0065] With this procedure, in line with the invention, the extent to which the watery solution has been dried before manipulating the gas jet, is crucial.

[0066] Indeed, a manipulation carried out with the gas jet upon a part of the surface that has not been sufficiently dried, may not only lead to mattifying the colour on that part of the surface but may also cause to change the already obtained structure, image or pattern.

[0067] The latter procedure can also be applied intentionally in order to obtain yet another effect.

[0068] With yet another selected implementation of the technique in line with the invention, a watery solution consisting of water and one or more coloured substances, e.g. pigment, is put on a surface, where, by decreasing the flame of the gas jet, it becomes possible to make drawings on the surface by moving the flame over the

watery solution and deposit soot that is coming from the tip of the flame.

[0069] With the implementation of this technique, in line with the invention, the gas jet can, as it were, act like a brush whereby on the surface soot is used instead of charcoal.

[0070] Another working method in line with the invention consists of letting the gas jet burn the support underneath the watery solution in such a way that the support there changes colour.

[0071] In doing so, in line with the invention, it is possible to create shadows on the already existing colour layers on the support.

[0072] We understand that a shadow or a dark colour created by means of burning the surface of for example a painting or an artwork in its final result differs completely from a shadow or a dark part which has been created by putting a dark colour on the surface.

[0073] Implementing this technique in line with the invention whereby the support is partly burned there, is a first possibility to at first provide the support with an underlying drawing and subsequently burn parts.

[0074] Depending on the degrees of burning, the effects will of course be different.

[0075] Then the support, typically a sheet of paper, can be stretched and one can go on working on this stretched paper with the standard techniques such as e.g. the classic painting techniques which use oil paints, watercolour paints, inks or the classic injection techniques and so on.

[0076] Another possibility is to provide the support with an underlying drawing and to subsequently stretch the support.

[0077] Finally parts of the stretched support can be burned with the gas jet, which may or may not be done while painting on the stretched support, for example with a watery solution consisting of one or more colouring substances.

[0078] In order to apply this technique successfully, it is advisable that as a support a sheet of paper is chosen that is sufficiently strong and preferably heavy.

[0079] Paper that is suitable for this technique in line with the invention whereby parts of the paper are burned, should in line with the invention, have a base weight of 250gsm, but 300gsm is better and more than 300 gsm is the best.

[0080] According to yet another interesting technique in line with the invention, a watery solution is put on the support consisting of a mixture of water and one or more substances with colour that can oxidise at an elevated temperature such as for example certain inks, or ecoline and so on, and then the following technique is applied: the flame of the gas jet moves smoothly over the watery solution which results in an oxidation reaction that triggers a change of colour or raises the reflection in that part.

[0081] An advantage of this working method in line with the invention is that because of the oxidation reactions that take place at higher temperatures when applying the appropriate substances such as e.g. ink, ecoline, and so

on, the colours of these substances will be transformed.

[0082] The colours then not only get intensified, they also get a special glance and/or a reflection which is quite noticeable.

[0083] A possible explanation for the change of colour is that due to the oxidation reaction other elements are formed that have a different emission spectrum than the first substances.

[0084] Another effect that can be obtained with oxidation reactions that take place in the watery solution is an increase of the reflection.

[0085] A possible explanation of this phenomenon is that in some specific cases, molecules with a linear structure are formed, as for example cyclohexane and so on, whereby these linear shaped molecules act as a kind of mirror for incident light.

[0086] The reflection perceived by the observer depends on his position in relation to the artwork. As such an additional interaction with the observer is made possible and the observer may be allocated a more active role when observing the artwork or may experience another sensation than is the case with artworks made with the traditional or well-known techniques.

[0087] These qualities of the substance inherited properties can only be obtained by implementing the above mentioned method in line with the invention, more in particular only by using the technique of adding energy in the form of heat.

[0088] With this method again a sheet of paper that previously has been stretched can be used as a support.

[0089] While putting an image, a drawing, a pattern, a figure or the like, for example by painting with a watery solution on a stretched surface, the intended colour transformation can be obtained by moving the flame of the gas jet over the paper that is still wet.

[0090] For applying this technique, some experience is required.

[0091] In order to avoid early dehydration, there should be enough watery solution and colour in the watery solution, otherwise the oxidation reactions will not occur.

[0092] According to yet another selected technique in line with the invention, a watery solution containing one or more substances is put on the surface, e.g. one or more salts that at an increased temperature lead to the formation of crystal structures, and then the gas jet is used to carry out an operation that consists of heating the watery solution with the flame of the gas jet in order to increase the temperature up to the area whereby the formation of crystal structures is activated.

[0093] With this technique, in line with the invention, the watery solution preferably contains one or more of the following substances or salts that at an increased temperature may induce crystal structures:

- sodium sulfate
- sodium acetate
- copper sulfate
- magnesium chloride; and/or

- iron chloride.

[0094] When these salts, especially salts that easily crystallise or other substances suitable for this purpose in a watery solution, are put on the surface, which is usually paper, it is possible with the gas jet to add energy in the form of heat on certain parts of the surface, whereby the formation of crystal structures in the watery solution is activated and/or in these parts stimulated.

[0095] On other parts of the surface where no heat is added, the salts or other substances there rather function as an absorbent material in which a part of the watery solution can be absorbed.

[0096] This functioning as absorbent material is an additional method for creating new patterns and structures in the final result.

[0097] When applying this technique in line with the invention the surface or the paper can be stretched again.

[0098] Here it is important to hold the paper horizontally in order to keep both the salts and the water on the paper.

[0099] On the one hand it is necessary to put enough water onto the surface and to sufficiently supply the salt with heat in order to be able to create crystal structures.

[0100] On the other hand one should beware of heating the support and/or the salts too intensely as they can be burned which might result in getting impurities within the formed crystal structures.

[0101] To form crystal structures relatively much water is needed and the process is also relatively time-consuming.

[0102] The duration of the crystal structure formation is between a few minutes and several hours.

[0103] As soon as a crystal structure is formed, no more water may be poured on the structure, otherwise the crystal structure will be destroyed or the crystals will dissolve.

[0104] It is possible to protect that kind of crystal structure against water by drenching it with non water based varnish.

[0105] When a layer, whether or not provided with varnish, has been finished one must wait until the layer has completely dried before making new layers.

[0106] By doing so one can get layers that are quite thick if desired.

[0107] On average it takes about two hours till the crystal structure has been formed beautifully and it takes 10 to 24 hours before everything is dry.

[0108] The technique applied in watercolour art is viewed by many as a sketchy technique.

[0109] Watercolour painting is popular because the paintings or drawings can be finished in a relatively short time because the water normally dries pretty fast.

[0110] This technique also requires a certain skill from the painter in applying watery strokes on the paper quickly and within a short period of time.

[0111] In short, one of the great advantages of the watercolour technique and of other watery techniques is simply the speed at which a painting is done.

[0112] The technique presented here, in line with the invention, according to which crystal structures are formed, is contrary to the common, swift way of proceeding.

[0113] For example, the making of a painting with the technique in line with the invention whereby several layers are created, may easily take several days.

[0114] With the proposed working method in line with the invention still accuracy and quickness are needed while painting, but the waiting times for the formation of crystal structures are long.

[0115] A painting made with this new technique still maintains the dynamic element that can also be found in paintings created with the classic, well-known watercolour techniques.

[0116] Each salt in itself is, depending on the circumstances and the conditions such as for example temperature, is being classified in line with a crystal structure whereby its molecules are classified by specific crystal grids.

[0117] The crystal structures referred to in this patent text, form large uniform structures with an aesthetic quality that is macroscopically clearly visible.

[0118] To get this formation of crystal structures, energy is needed and eventually a good catalyst such as one of the mentioned salts or any kind of other substance.

[0119] According to yet another selected implementation of the technique in line with the invention, a watery solution containing at least one substance with colour is put on the surface, whereby the gas jet carries out an operation that consists of heating the watery solution locally in order to attract one or more substances with colour to the heated area.

[0120] In a watery environment pigment particles or particles from other colouring substances are normally more or less attracted to other parts that have higher temperatures.

[0121] As such, by making use of the gas jet, the pigment or the colouring substance can be directed to another envisioned spot on the surface.

[0122] It should be noted that this directing is limited.

[0123] For example it would not be practical or efficient to transfer pigment or a colouring substance on a surface for a long distance or to move the paper with the help of the gas jet.

[0124] The purpose of course is to put the pigment or the colouring substances from the start more or less on the right spot on the support in order to more or less redirect their location by using the gas jet and/or obtain an energetical-looking effect.

[0125] With this technique in line with the invention it is important to keep certain parts of the surface wet and other parts dry, in order to bound an area with watery solution where the colouring substances of the pigment can move and can be steered by the gas jet.

[0126] Depending on the subject it is possible to produce very realistic work by exclusively using the gas jet to manipulate pigments or colouring substances without

any use of brushes or other classical tools.

[0127] In conclusion it can be said that with the techniques that have been explained in line with the invention, it is possible to introduce a certain new aesthetic design, whereby on a support extra texture can be obtained by heating water or a watery solution to their boiling point, whereby shadowed areas with an extra dimension can be created by burning the support in varying degrees, whereby colouring substances can be propelled under the pressure generated by releasing the gas from the gas jet and by the attraction or repulsive force between the applied substances, whereby soot can be deposited on the support by making the flame of the gas jet move over the surface whereby adding energy in the form of heat can activate oxidation reactions that produce new colours and/or reflections whereby salts or similar suitable substances can be activated by adding heat with the gas jet so that on the surface crystal structures can be formed.

[0128] It is clear that all the techniques described above can be combined as one pleases.

[0129] The sequential order of the different steps as described above can be altered in function of the application that is chosen.

[0130] The invention does not exclude techniques for creating works of art whereby energy is added with the help of a gas jet in order to activate other chemical reactions or to activate other physical processes than those described above.

[0131] At the same time the invention is not restricted to only applying the techniques described above in line with the invention for putting figures, drawings, patterns, pictures, images and the like on a support, other techniques can also be used without surpassing the field of the invention.

Claims

1. Working method for applying figures, drawings, patterns, images, pictures or the like to a painting support **characterised in that** the technique consists of at least the following steps:

- putting a watery solution on the surface whereby the watery solution contains one or more substances with colour such as ink, pigment, aquarelle paint, ecoline and so on; and,
- manipulating the watery solution with a gas jet.

2. Working method in line with claim 1, that is **characterised in that** first water is being put on the surface, that then the water is being heated with the gas jet and that then a watery solution is formed by adding one or more substances with colour such as ink, pigment, aquarelle paint, ecoline and so on, to the heated solution.

3. Working method in line with claim 1 or 2, that is **characterised in that** a watery solution consisting of water and one or more substances with colour, such as ink, pigment, aquarelle paint, ecoline and so on, is applied on the surface whereupon the watery solution is heated with the gas jet. 5
4. Working method in line with one or more claims stated above **characterised in that** while heating with the gas jet bubbles are being formed in the water or in the watery solution. 10
5. Working method in line with one or more claims stated above, **characterised in that** a watery solution containing one or more colouring substances, like e. g. pigment, is applied to the surface, whereupon the watery solution is heated with the gas jet in the course of which water from the watery solution is evaporating and one or more colouring substances are clotting together to form a film upon the water or a crust on the surface. 15 20
6. Working method in line with claim 5, **characterised in that** the film or the crust is going to be broken in the next operation. 25
7. Working method in line with claim 6, **characterised in that** before the film is being broken and with the help of an injection needle, another substance with colour is added under the film on the watery solution. 30
8. Working method in line with one or more of the previous claims, **characterised in that** a watery solution consisting of a mixture of water and one or more substances with colour such as ink, pigment, aquarelle paint, ecoline and so on, is being put on the surface whereby a pattern, an image or a picture is made, the watery solution highly dried, and the gas jet manipulated in a way that its flame is being moved over parts of the surface in order to mattify the colours without changing the image or the drawing of the pattern, the picture or the image. 35 40
9. Working method in line with one or more of the previous claims, **characterised in that** a watery solution consisting of a mixture of water and one or more substances with colour such as e.g. pigment, is put on the surface whereupon the gas jet is manipulated in such a way that the gas jet is enabled to draw by using its lowered flame whereby the tip of the flame is moving over the watery solution in order to deposit soot there. 45 50
10. Working method in line with one or more of the previous claims, **characterised in that** the gas jet is manipulated in such a way that the support underneath the watery solution is being burned as a result of which the support there changes colour. 55
11. Working method in line with one or more claims stated above, **characterised in that** a watery solution containing one or more substances with colour that can be oxidised at an elevated temperature, such as ink, ecoline and so on and that the gas jet is manipulated in a way that its flame is being moved over the watery solution so that there, in the watery solution, an oxidation reaction occurs resulting in a change of colour or an increase of reflection.
12. Working method in line with one or more claims stated above, **characterised in that** on the support a watery solution containing one or more substances, for example one or more salts that at an elevated temperature lead to the formation of crystal structures and whereby the gas jet is manipulated in a way that its flame heats the watery solution to elevate the temperature up to the area whereby the crystal structures are activated.
13. Working method in line with claim 12, **characterised in that** a watery solution containing one or more of the following substances or salts that at an elevated temperature can lead to the formation of crystal structures:
 - natrium sulfate;
 - natrium acetate;
 - copper sulfate;
 - magnesium chloride; and/or,
 - iron chloride.
14. Working method in line with one or more claims stated above, **characterised in that** a watery solution containing at least one substance with colour is applied to the support and whereby the gas jet is manipulated in such a way that the flame's driving force can steer parts of the watery solution in the desired direction.
15. Working method consistent with one or more claims stated above, **characterised in that** a watery solution containing at least one substance with colour is applied to the support whereby the gas jet is manipulated in such a way that the watery solution is heated locally in order to attract one or more substances with colour to the heated area.



EUROPEAN SEARCH REPORT

Application Number
EP 15 17 4668

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (IPC)
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Place of search		Date of completion of the search	Examiner
Munich		12 August 2015	Langbroek, Arjen
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82