



BERNE DECLARATION

Improving the Legal Position of Stakeholders of Bioresources in the Statutory Law of developed industrial Countries

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1. The Statutory Framework of Stakeholder Participation

1.1 Enabling Stakeholder Participation

A provision from the Swiss Patent Act of 1953/56 conceivably offers a solution to the problem of introducing stakeholder participation in patents. In Art. 3 Par.1 of the Act the conflict of interests between the employer (material contribution) and employee-inventor (intellectual contribution) in the case of employee made inventions is resolved by assigning the patent rights to the inventor, or his legal successor, or to a third party that may be entitled to the invention „*on other legal grounds*“. This wording was conceived to ensure that the employer has an original claim to the acquisition of patent rights in the case of employee made inventions.

A functional interpretation of this Art. 3 of the Statute could, even *de lege lata* and without systematic difficulties, include the contribution of a bioresource by a stakeholder – whether in a merely factual or contractual context – among the "*other legal grounds*" for an original acquisition of patent rights: as the employer provides materials and funds for the inventive activities of the employee, so the stakeholder provides his bioresource as a basis for the inventions of an inventor. The succinctly phrased "*other legal grounds*" in Art. 3 of the Statute offers the additional advantage of including both the willing and knowing, i.e. contractual transfer and the use of bioresources without the consent of the stakeholder and thus the unlawful act of "biopiracy" proper.

This approach based on Art. 3 would lead to a shared ownership of patent rights between the inventor and the stakeholder of bioresources as provided for under statutory law for the ordinary case of joint inventorship (Art. 59 EPC, § 6 par. 2 German Patent Act, Art. 3 par. 2 Swiss Patent Act).

However, considering the typically strong disparity in the technical weight of the respective contributions of the inventor and the stakeholder of bioresources, the assumption of an equal distribution of property quota provided for in ordinary cases of joint inventorship could not simply be transferred to the typical inventor-stakeholder relation. A reference to the relevance of the (technical) value of the resources for the invention in question would emphasize that ownership quota have to be determined – if necessary in a judicial procedure– on a case by case basis.

1.2 Stakeholder Participation Based on the Statutory Model of Processing of Materials (*Specificatio*)

(1) The situation in patent applications for inventions based on biological resources is similar to that encountered in the processing of materials in civil law of the Roman legal tradition (*specificatio*). As in the case of *specificatio*, there is a party (stakeholder of bioresources) that contributes a resource – like the owner of materials in civil law – and a party (inventor, patent applicant) that – much like the processor of materials – contributes labour to the final result of an invention. This similarity immediately suggests that a legal solution based on the model of *specificatio* might be appropriate in our context: cfr. §§ 950, 951 of the German BGB, and Art. 726 of the Swiss Civil Code.

In the late eighties, German courts considered extending §§ 950 and 951 to the production of computer software as a typical fruit of intellectual labour, but ultimately discarded the idea on the grounds that only moveable property could constitute „*new property*“ in terms of the *nova species* of Roman civil law and that magnetic recordings on a data carrier did not generate „*new property*“ of this kind. This denial to apply the rules of *specificatio* to intellectual results of labour seems exceedingly formalistic and hardly convincing under a functional point of view. The immediate products of processing (see Art. 64 (2) EPC) or substances based on biotechnological inventions produced by practising the teaching of patent claims also constitute moveable property in terms of property law. Admittedly, the *nova species* in these situations is not immediately produced through the physical modification ("processing or reconfiguration") of existing specimens of a bioresource but rather through the intellectual communication of an invention and the practice of the teaching of the invention. Nevertheless, at the end of this line of argumentation there are *novae species* in terms of property law. Therefore the application of the rules of *specificatio* to inventions based on bioresources and patent protected products should be considered even *de lege lata*. *De lege ferenda* the traditional rules of *specificatio* could be adapted to patent law by means of minimal amendments.

(2) Following this suggestion co-operation between the stakeholder of biological resources and the inventor would normally result in the inventor being awarded ownership of the patent given his typically more valuable contribution. In view of his typically less valuable contribution the stakeholder of bioresources would in turn be entitled to restitution of profits or profit-sharing with the inventor and patentee. This claim would be based on the legal model of enrichment pursuant to §§ 951 German BGB and Art. 726 Swiss Civil Code. Concerns about the application of the rules of enrichment could be overcome by reference to the rules of *specificatio*. Concern about including a profit-sharing element into such enrichment claims could be disregarded, if necessary, by further adapting the additional legal criteria for awarding such profit elements. This enrichment claim would be fulfilled typically by licensing fees in the form of royalties; in cases, where the technical weight of the resource for the invention is negligible, it might attain the value of zero.

(3) Only in exceptional cases it is conceivable that applying the rules of *specificatio* would lead to confer ownership of the patent to the stakeholder of bioresources, if the resource constitutes the key element or the critical input for an invention and, therefore, its value exceeds that of the contribution of the inventor. In such an exceptional situation, the stakeholder of resources would become the „beneficiary“ pursuant to §§ 6 and 8 of the German Patent Act, Art. 3 (2), 26 Nr. 6 and 29 (1) of the Swiss Patent Act as well as Art. 60 EPC, even if the value of his contribution exceeds that of the inventor's contribution only slightly. In

this situation, due to his loss, the inventor would be entitled to seek compensation from the stakeholder of the resources commensurate with the technical value of his intellectual contribution pursuant to § 951 BGB.

(4) If the inventor acquired the biological material in bad faith, Art. 726 par. 2 of the Swiss Civil Code provides for ownership of the invention and patent rights to the stakeholder of resources even if the contribution of the processor (inventor) is more valuable than that of the stakeholder. Whether this also applies if an inventor acquires biological source materials in violation of the convention and whether a possible must-know clause would be sufficient to justify the assumption of bad faith would have to be assessed on a case by case basis.

Given these possibilities of differentiating on the basis of both, the objective value of the contribution *and* the subjective criterion of bad faith, problem solving between the interests of stakeholder and inventor modelled on the *specificatio* of Roman law would seem to constitute a particularly balanced approach to benefit sharing provided for in Art. 1 and 15 (7) of the CBD.

2. Duty of disclosure of the Origin of Bioresources: Conformity with the TRIPS-Agreement

(1) Starting from the concept that the stakeholder of bioresources acquires participation in the rights to the patent on the basis of the model of *specificatio*, then the proposed disclosure obligation would not serve to assess the patentability of the object of application but to establish the owner or joint owners of the patent rights. Since the TRIPS-agreement does not define ownership of the rights, the member states of WTO must be entitled under the rule of *implied powers* in international law to provide for the procedure to establish ownership of the rights and, if needed, for a judicial procedure to assess disputed claims.

On the other hand, if it is assumed that the stakeholder of bioresources acquires a right to compensation *ex lege* under mechanism of undue enrichment, the proposed duty of the applicant to disclose the origin of the bioresources would serve to secure evidence and, if needed, prepare the judicial enforcement of legal claims in a civil lawsuit. Given this content this procedure is so intimately linked to the patent application procedure that the WTO member state – again under the rule of *implied powers* – should not be denied the right to assign the preparatory phase of collecting of evidence to the administrative authorities (patent office) and the civil courts, as it sees fit.

As a result, the current version of Art. 27 TRIPS would not seem to contradict the proposed procedural duty of the applicant to disclose the origin of bioresources in either of the two alternatives.

(2) By the same token Art. 62 (1) TRIPS, which provides for the use of adequate procedures for the acquisition of intellectual property, would not seem to prevent the proposed duty of disclosure of the applicant. The disclosure of the origin of bioresources appears both *appropriate* and *necessary* to establish the (co-)ownership of the patents and therefore seems to be justified by this objective.

With regard to its content the proposed declaration of origin in the patent application administers to similar needs as the declaration of identity of the inventor or of acquisition of patent

rights: both declarations disclose relevant facts in the history of the invention and the filing of the patent application in question. Failure or denial to submit the inventor declaration or the declaration on the acquisition of patent rights within an appropriate grace period will result in the patent application being rejected under national statutory rules of most countries.

On the other hand, the proposed declaration on the geographic origin of bioresources would reveal the source of material input in the development of the invention and thus promote the key purpose of CBD: equal benefit sharing as provided for by Art. 15 (7) CBD. In view of Art. 27, 29 and 32 of TRIPS, it is difficult to recognise any reasons why the inventor declaration or the declaration on the acquisition of patent rights should merit a different legal treatment than the proposed disclosure of the origin of bioresources.

It might even be argued that the patent authorities of member states of the WTO are entitled – *de lege lata* and without any intervention of formal national legislation – to require the proposed declaration of origin of bioresources as an integral part of the declaration regarding the acquisition of patent rights as provided for in Art. 81 EPC, § 37 of the German Patent Act and Art. 34 (1c) of the Guidelines to the Swiss Patent Act.

3. Practical Enforcement of the Duty of Disclosure

(1) The efficiency of enforcing the proposed duty of disclosure and its capacities to promote patent application procedures and to implement the access and participation régime of the countries of origin of bioresources raises considerable concern. As stated by the Conference in the Hague in spring 2002 the matter still remains under examination. In assessing this efficiency of the disclosure obligation three features require individual consideration:

(a) The disclosure of the geographic origins (*country of origin*) of biological source materials used in the development of the patented invention in a declaration filed by the applicant is merely a precursor and will, in the best of cases, alert the patent authorities in the country of application to the existence of "a situation".

(b) In order to implement the key purposes of Art. 15 CBD, it is essential that evidence be provided that the access and participation *régime* of the country of origin was respected with regard to the acquisition of the source material in question. The pertinent certificates issued by the authorities of the country of origin constitute such evidence.

c) Respecting the access and participation *régime* of the country of origin does not *per se* assure that the stakeholder in the country of origin will in fact participate in the future economic benefits of the invention in a far distant country of the patent application. Only documented evidence of a fair and equitable benefit-sharing agreement between the stakeholder and the patent applicant would protect the financial interests of the stakeholder. The relevant documents, possibly in combination with the required official permits of the country of origin constitute such evidence.

Disclosure of origin in a declaration filed by the patent applicant (a) should allow the patent office in the country of application to verify, without further investigations of its own, where the bioresources were acquired and to determine the locally applicable access and participation régime. If the biological source material of an invention is acquired in different stages it should not be sufficient to disclose only the last station from which the material was trans-

ferred, e.g. a scientific institute in an industrialised country, and leave the remaining investigations to the patent office.

Whether a declaration of the applicant (a) in addition to the certificate of origin (b) and in addition to the contract document (c) is needed, raises doubts. One point in favour of such a declaration is that it would help to prevent the poorest developing countries from issuing "certificates of convenience" and "cheap contracts" for bioresources of foreign origin for financial reasons. Such "certificates of convenience" – comparable to certain "flags of convenience" in maritime law – would allow a patent applicant to avoid more stringent and expensive requirements in the real country of origin of bioresources. If the applicant is required to submit his own separate declaration (a) of the origin of a bioresource and he therein misstates the facts on purpose, then his application should be rejected.

To improve the efficiency of enforcement supplementing the duty to disclose and submit supporting documents with a corresponding feedback obligation on the part of the patent authorities in the country of application to the authorities in the country of origin or to an international authority such as WIPO should be considered. Such an exchange of information, comparable to problem solving instruments in the field of tax evasion and financial networking, would most conveniently be implemented in the context of WIPO or the UNEP secretariat.

The same holds for the administrative sanctions proposed by the European Community such as increased fees for a failure to submit information to the authorities or for submitting false information. It can easily be seen that this proposal would be far from being a valuable instrument to improve efficiency: typical "bio -pirates" would doubtless prefer to pay such modest administrative surcharges in order to avoid paying the considerably higher licensing fees to the stakeholders of bioresources. This proposal, therefore, provides little incentive for patent applicants to comply with the CBD or the access and participation *régime* of the country of origin.

As provided for with other formalities in the patent application procedure rejecting the patent application for failure or denial to submit the respective supporting documents within an appropriate grace period would constitute the only effective sanction. Most national legal systems provide that non-compliance with certain procedural obligations will result in a rejection of the patent application, notably the failure to submit certain documents within an appropriate grace period. To this date and to our knowledge it has not been claimed that such national statutory provisions are in conflict with WTO rules. A rejection based on the failure to disclose the origins of biological source materials would supplement these rules in a systematically satisfactory way.

Unfortunately, the efficiency of enforcing the proposed duties of disclosure is severely limited, since professional patent applicants can avoid them easily by obscuring the dependence of an invention on biological resources and/or the origin of biological resources in the patent application. In view of these concerns it should be reconsidered, whether the attempt to obscure elements of biopiracy, i.e. the deliberate and wilful falsification or suppression of relevant facts concerning the origin of biological source materials in a patent application should not be held sufficient cause for rejecting a patent application or revoking a previously granted patent.