To Whom Belong the Copyrights on a Software Developed by a University Researcher?

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Based on the applicable university regulations, the copyrights on the software developed by a PhD candidate who was working as a researcher/employee at a Swiss public university (the University of Lausanne) within the framework of her employment agreement were found to be owned by the University. However, the employee retained the moral rights on the software (specifically the right to be recognized as the author of the software – paternity right).

Judgment of the Federal Supreme Court of 22 November 2022
Case Reference : 4A_317/2022

Facts

In 2006, A. was hired by the University of Lausanne ("UNIL") as a graduate assistant in biology. At that time, A. had no expertise in the field of computer programming.

Two months earlier, A. had signed a statement of work ("*cahier des charges*") outlining her work at UNIL. Pursuant to the statement of work, A.'s duties included the following: supervising seminars in the Bachelor's program, meeting with students, correcting their work, taking part in examinations and writing a thesis on circadian rhythms in ants under the supervision of Prof. B. Software development was not included in A.'s statement of work.

Between 2006 and 2010, the employment agreement between A. and UNIL was renewed four times, until 2011. Software development was still not mentioned in the new statement of work agreed upon between A. and UNIL (together, the "Parties") in 2009.

From 2006 to 2011, A. developed different software products (the "Software") to analyze the movement and behavior of ants on the basis of data provided by an ant-tracking software, which uses images from a tracking system made up of a physical mechanism consisting of boxes, with a heating system, lighting and one camera per box to film the ants. The Software enabled A. to process the data for her doctoral thesis and analyze the circadian cycles of ants. She would not have been able to complete her doctoral thesis without the use of the Software.

After obtained her PhD in life sciences in 2012, A. was hired as a research fellow by UNIL for six months. Her new statement of work included the maintenance of the tracking system and the development of new methods for analyzing the data supplied by the system.

In June 2018, Prof. B. suggested A. make the source code of the Software publicly available.

In September 2018, A. uploaded the Software to the GitHub platform (https://github.com/) with the caption "Copyright © A. All rights reserved".

In November 2018, Prof. B. sent a formal notice to A. in which she was ordered to cease using the copyright notice "Copyright © A. All rights reserved" in connection with the Software on the GitHub platform or any other platform. Prof. B. requested A. to mention UNIL as the copyrights holder of the Software and to reflect this in the copyright notices of all software she had developed in the framework of writing her doctoral thesis and/or of her employment at UNIL.

Pre-litigation discussions, including a mediation attempt before an ombudsperson, exchange of letters, and formal notices,

between them did not lead to an agreement.

In January 2020, UNIL filed a takedown notice with the US company managing the GitHub platform to request that the "copyright" notices shown on A.'s account be changed. However, the US company did not comply with this request.

In September 2020, UNIL requested an order on interim measures from the delegated judge of the Cantonal Court of the Canton of Vaud, which ordered A. to cease using the copyright notice "Copyright © A. All rights reserved" on the GitHub platform or any other platform, and to replace it with the following wording "created by A. on [date] – Copyright [year] UNIL – All rights reserved", which it obtained in November 2020.

UNIL filed the claim on the merits by which it requested from the court an order that A. had to cease using the copyright notice "Copyright © A. All rights reserved" in connection with the Software on the GitHub platform or any other platform, and to attribute to UNIL the copyrights on the Software that she had developed in the framework of writing her doctoral thesis and/or of her employment at UNIL, under threat of criminal penalty under Art. 292 of the Swiss Criminal Code (SCC).

The Cantonal Court upheld the claim brought forward by UNIL. A. filed an appeal with the Federal Supreme Court and essentially claimed that the decision of the Cantonal Court was arbitrary because it relied on facts/evidence that would have been arbitrarily established.

Issue

The Federal Supreme Court was called upon to decide whether the decision made by the Cantonal Court was valid with respect to the determination of the ownership of the copyrights on the Software developed by A. in light of the applicable university regulations.

Decision

UNIL claimed that its former employee A. had to cease using copyright notices attributing her the copyrights on the Software that she had developed in the framework of her doctoral thesis and/or of her employment at UNIL. UNIL consequently claimed that it be declared the owner of the copyrights on the Software.

In accordance with the creator principle (*principe du créateur ; Schöpferprinzip*; Art. 6 of the Swiss Copyright Act (SCA)), the author of a work is the natural person that has created the work. The author of a work owns moral rights over his/her work, including the authorship right, which allows the author, inter alia, to be recognized as the author of the work (paternity right; Art. 9 para. 1 SCA).

A legal entity cannot have the status of author, but it can be the holder of copyrights, given that the copyrights on a work can be assigned to a third party (Art. 16 para. 1 SCA). A natural person can be the author of a work and can consequently assign his/her (economic) copyrights on such work to a legal entity. In principle, all (economic) copyrights can be transferred. There are no formal requirements for the validity of such transfer.

In principle, the creation of a work in the framework of an employment agreement does not prevent the employee to be the author of the work. The parties to the employment agreement may stipulate that the copyrights on any work created by the employee in the framework of an employment agreement shall belong to the employer.

A special statutory regime is set forth in Art. 17 SCA that applies to the allocation of the copyrights on software developed by an employee. According to this regime, the employer has the exclusive right to exercise the exclusive use rights (including the right to modify the work) on any software that has been created by an employee within the framework of the employment relationship and in accordance with the contractual obligations of the employee. The employee who has developed the software retains in principle the moral right to be recognized as the author of the software.

The application of Art. 17 SCA presupposes a close substantive link between the creation of the software and the activity of the employee in the company, irrespective of whether the software has been developed during working hours or at the work place.

Pursuant to the majority opinion expressed in legal literature, the special statutory regime of Art. 17 SCA does not apply to software created by employees whose employment relationships are governed by public law, such as the employees of Swiss public universities, for which public (university) regulations apply. That being said university regulations may mirror the allocation of copyrights anchored in Art. 17 SCA.

The Federal Supreme Court did not address questions regarding the applicability of Art. 17 SCA to employment relationships governed by public law, nor the legal nature of such statutory regime. In that regard, there is an ongoing debate about whether Art. 17 SCA institutes a legal transfer of the copyrights to the employee, or a legal license or a legal presumption of the right of the employer to use the software.

The Federal Supreme Court cited the relevant public law which determines the ownership of software developed by employees of UNIL. The relevant law is the Law on the University of Lausanne (Loi sur l'Université de Lausanne [LUL]) and in particular Art. 70 LUL, pursuant to which (free translation):

"1. With the exception of copyrights, the University [of Lausanne] shall be the owner of the intellectual property rights on all technical intellectual creations, as well as research results, obtained by members of the teaching staff in the performance of their duties at the University. Any agreements containing transfer or licensing clauses in favor of third parties who have partially or fully financed research are reserved.

2. The exclusive rights to use software created by members of the teaching staff in the performance of their duties at the University shall revert to the latter."[1]

The Cantonal Court held that the parties were bound by a public law contract, and that A., as an assistant, was a member of UNIL's teaching staff (Art. 52 para. 1 LUL), and hence that Art. 70 LUL applied to A. The Cantonal Court took the view that Art. 70 LUL has the same substantive content as Art. 17 SCA. The Federal Supreme Court did not have to decide on this issue given that this was not challenged by A. in her appeal.

The Cantonal Court first noted that software development was not included in the various statements of work("*cahier des charges*") signed by A. for the different positions she held at UNIL. However, the Cantonal Court found that the reference to "thesis work" in A.'s statement of work included all work relating to the completion of her doctoral thesis, and that the Software was an indispensable tool for the writing of A.'s doctoral thesis, since it would not have been completed without the use of the Software.

After assessing the available evidence, the Cantonal Court ruled that A. could not have completed her thesis without using the Software she had developed during her professional career. On this basis, the Cantonal Court held that, although A. must be considered the author of the Software, the economic rights to the Software she created are owned by UNIL.

In view of the above, the Federal Supreme Court upheld the judgment handed down by the Cantonal Court, and thus rejected the appeal brought forward by A.

Key takeaway

Employers (both private companies and public institutions, including academic institutions) must carefully anticipate the challenges that may arise concerning the allocation of the ownership of copyrights on software developed by their employees.

The Swiss Copyright Act (Art. 17 SCA) provides for a special statutory regime regarding the allocation of copyrights on software developed by employees under certain conditions. Even if this provision applies only to private employment agreements, i.e. to employment agreements entered into between individuals (as employees) and private companies (as employers), it may still serve as a relevant source of guidance for employment agreements in the public sector (and particularly in Swiss academic institutions) provided that Art. 17 SCA is mirrored in the corresponding public regulations.

In this respect, one must note that the relevant cantonal regulation in the case at hand does not perfectly mirror Art. 17 SCA.

Art. 70 para. 2 LUL only requires for the exclusive rights to use software created by members of UNIL teaching staff to revert to UNIL that such members create the software "in the performance of their duties at the University" without requiring that this shall be in compliance with the contractual obligations of the relevant employee (Art. 70 para. 2 LUL: "The exclusive rights to use software created by members of the teaching staff in the performance of their duties at the University shall revert to the latter").

By contrast, the allocation of economic rights on the Software to the employer under Art. 17 SCA must meet two cumulative conditions: the software must have been created by the employee (i) within the framework of the employment relationship and (ii) in compliance with the contractual obligations of the employee. This presupposes the existence of a

close link between the creation of the software and the activity of the employee within the company, which does not depend on whether the software was developed during or outside of working hours, or within or outside of the work place.

In this case, the conditions set out by the relevant cantonal regulation were found to be met even if A.'s various statements of work at UNIL did not expressly mention the development of the Software (it being reminded that Art. 70 para. 2 LUL does not require – contrary to Art. 17 SCA – that the creation of the software shall be made in compliance with the contractual obligations of the employee). This conclusion was drawn because the development of the Software was deemed an indispensable tool for A. to complete her PhD thesis, a task which was explicitly outlined in her statement of work.

Comments

Even though this case relates to the application of a specific local (cantonal) public law (i.e. the Law on the University of Lausanne), its relevance for the business world should not be underestimated: the allocation of copyrights on software created by employees can be of significant practical importance in business transactions.

This can be particularly relevant in M&A transactions during which the intellectual property (IP) due diligence process must ensure that the target company owns the copyrights on the software developed by its employees (for a discussion, see e.g. Jacques de Werra, Les pièges de la due diligence en matière de propriété intellectuelle et de technologie, in : Entreprise et propriété intellectuelle : travaux de la journée d'étude organisée à l'Université de Lausanne le 3 juin 2009, Lausanne [CEDIDAC] 2010, p. 13-47 at p. 24 et seq., available at : https://archive-ouverte.unige.ch/unige:12171).

This issue can also be of significant relevance in the context of transactions with academic institutions (e.g. spin off/technology transfer) in the course of which the issue of the ownership of the copyrights on the software developed at an academic institution can also be challenging (see e.g. the UK case Cyprotex Discovery Ltd v The University of Sheffield, [2004] EWCA Civ 380*)*.

This case is relevant beyond copyright law and can be very instructive for the more general topic of the allocation of IP rights (beyond copyrights) for those rights created by employees, including in academic institutions, given that the conditions of application of Art. 17 SCA mirror those applicable to inventions and designs created by employees that are governed by Art. 332 SCO, and that the Federal Supreme Court referred to its case law on the latter to interpret the former. This is also an issue which is frequently litigated in other jurisdictions (see e.g. the recent decision of the UK Patents Court in Oxford University Innovation v Oxford Nanoimaging Limited [2022] EWHC 3200 (Pat) *, which interestingly deals with the issue of the allocation of patent rights on an invention created by a PhD student*).

One must note that the Federal Supreme Court merely conducted a narrow legal review of the Cantonal Court's decision which entailed essentially looking for arbitrariness that would have allegedly been committed by the Cantonal Court while establishing the facts and assessing the evidence on the record). Despite this, the judgment of the Federal Supreme Court is relevant for its practical takeaways.

First of all, this judgment is interesting because it confirms that the employer can own the economic rights on the software developed by its employee under the applicable statutory University regulation even if the development of the software was not explicitly identified as being one of the contractual obligations of the employee in the employment documents (in this case, the statements of work of employee A.).

It further recalls that, pursuant to Art. 17 SCA, in employment agreements, in the absence of provisions to the contrary, the exclusive use rights (including the right to modify the work) on a software created by an employee (i) within the framework of the employment relationship and (ii) in accordance with his/her contractual obligations shall be held by the employer.

One can however regret that the Cantonal Court held that the applicable cantonal regulation provision regulates the allocation of the exclusive use rights on software in the same way as Art. 17 SCA, even though the wording of the relevant provisions is clearly different (as noted above). The Federal Supreme Court unfortunately did not have to decide on this very important legal issue because A. did not challenge the analysis made by the Cantonal Court in her appeal.

The Federal Supreme Court also unfortunately left the issue of whether Art. 17 SCA and the corresponding public law regulations provide for the statutory transfer of the copyrights (the economic rights on the software) to the employer or whether they provide for something else (including the grant of a statutory license from the employee to the employer) open to debate. This issue is still widely debated in legal literature. One should, however, consider that Art. 17 SCA provides for the statutory transfer of copyrights to the employer so that the employer can fully dispose of them without

constraints. This corresponds in essence to Art. 332 para. 1 SCO which governs the allocation of the patent and of the design rights resulting from the creative activities of an employee and sets out that those rights are deemed to "belong to the employer" (pursuant to the wording of Art. 332 para. 1 SCO).

In any event, the key takeaway of this case law is to recommend that employment agreements expressly define the allocation of the ownership of the copyrights on software created by employees given that Art. 17 SCA is a default rule and not a mandatory provision which can consequently be superseded by contract.

Beyond the copyrights on software (which were the issue here), it is also strongly recommended to provide for clear rules for allocating all types of IP rights on all types of creative outputs created by employees in employment agreements.

The reason being that there is no provision under Swiss law (neither in the SCA nor in the SCO) that regulates the allocation of copyrights for works created by employees except for the specific regime of Art. 17 SCA, which only applies to software.

A contractual solution is needed because the default rule of Art. 17 SCA covers only the software itself, and not the software documentation (based on the opinion of scholars[2] – this has not been decided either by the Federal Supreme Court).

A contractual solution is also strongly recommended in order to address the modalities to exercise the moral rights that remain owned by the author, i.e. by the employee who can still request that his/her name be associated to the work (i.e. the software) even if the employer owns the economic rights on the software (as evidenced by this case law). This can materialize in a waiver by the employee of the exercise of his/her moral rights (which can be admissible under Swiss law). The contract could thus provide for a waiver of the exercise of moral rights of the author/co-authors/employee(s) or define the manner in which the moral rights of the employee(s) to be named as (co-)author(s) shall be implemented (e.g. use of the following copyright notice: "[Software] developed by [Employee] – Copyright © [Year] [Employer] – All rights reserved."), which is what was at issue in this case law.

In terms of the geographic scope of the use, one can recommend that the clauses to be included in the employment agreements shall allocate worldwide ownership on all IP rights related to the software and any other outputs connected to the software (including software documentation).

The parties (and specifically the employers) are also well advised to clearly stipulate in the employment agreement whether software development is part of the employee's obligations. According to the Federal Supreme Court, when an employee is fulfilling his/her contractual obligation (second condition), he/she is acting in the framework of the employment relationship (first condition). Therefore, specifying which kinds of software must be developed by the employee may also prove useful.

As software products are usually the result of the joint creative efforts of several people and can thus be developed by several employees (which can be subjected to diverging employment rules and contracts), it is recommended to have uniform IP rights ownership clauses in all relevant agreements.

Other comments of this judgment

Alain Alberini/Maxime Francis, Ownership of the rights to software developed by an employee, 15 May 2023,https://www.sigmalegal.ch/en/news/ownership-of-the-rights-to-software-developed-by-an-employee/

Sandra Künzi, Durchsetzen von Ansprüchen aus Urheberrecht ist ein dorniger Weg, medialex 07/23, 5. Sept. 2023, https://medialex.ch/2023/09/05/durchsetzen-von-anspruechen-aus-urheberrecht-ist-ein-dorniger-weg/

Vincent Salvadé/Daniel Kraus/Astrid Pilottin, TF 4A_317/2022 (f), Droit pour le praticien, https://www.droitpourlepraticien.ch/arret/36152/

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[1] Art. 70 para. 1 and 2 LUL reads as follow in the original French version:

"[1] A l'exception des droits d'auteur, l'Université est titulaire des droits de propriété intellectuelle portant sur toute création intellectuelle technique ainsi que sur des résultats de recherche obtenus par les membres du corps enseignant dans l'exercice de leurs activités au service de l'Université. Sont réservés les accords comportant des clauses de cession ou de licence en faveur de tiers

ayant financé partiellement ou totalement les recherches.

[2] Les droits exclusifs d'utilisation des programmes informatiques créés par les membres du corps enseignant dans l'exercice de leurs activités au sein de l'Université reviennent à cette dernière."

[2] See Jacques de Werra, in: Jacques de Werra/Philippe Gilliéron (edit.), Commentaire romand, Propriété intellectuelle, Basel (Helbing Lichtenhahn) 2013, Art. 17 N 7 LDA; Wolfgang Straub, Informatikrecht, Zürich (vdf) 2004, N 1.2.1.1. See however Roland von Büren/Michael Meer, in: Roland von Büren/Lucas David (edit.), Urheberrecht und verwandte Schutzrechte (SIWR), II/1, 3rd ed., Basel (Helbing Lichtenhan) 2014, p. 257, who consider that Art. 17 SCA can apply by analogy to software documentation. See also on the notion of software, Willi Egloff, Le nouveau droit d'auteur, 4th ed., Bern (Stämpfli) 2021, Art. 2 LDA N 32 and the cited references.