# On the commonality between literature and patents

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We will explore how the various traditions and methods of textual interpretation in German literary studies can map to established practices for the interpretation of patents and illuminate several contrasts between the traditions of patent interpretation in Germany and the USA.

At first glance, patents and in particular claims, on the one hand, and literary texts on the other<sup>2</sup>, could hardly be more different. *Luhmann*<sup>3</sup> classifies literature and art as "autonomous", i.e. as systems that have "no purpose other than themselves". But no one writes a patent or a patent claim without a purpose, specifically to obtain a legal advantage. Patents or patent claims as "art for art's sake" would be ridiculous.

Even so, patents and literary texts have such a substantial commonality that they each have become the subject of analogous interpretation and reading, i.e. the subject of hermeneutics. This is indeed a truism for literature. It is less well known that it is also true, and necessary, for patents; all the patents that will be examined within this paper have gone through a review process, within which the technical teaching of the patent claims was tested for novelty and inventive step, using interpretations similar to analogous to those used in analysing literary texts.

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According to recent interpretations of literature, patents and claims could be interpreted as literature in a broader or very broad sense. In the context of this paper, however, this will not be discussed further.

Luhmann, Niklas, The Work of Art and the Self Reproduction of Art. In: Stylistic perspectives and functions of a cultural studies discourse element. Ed. Hans Ulrich Gumbrecht, Karl Ludwig Pfeiffer. Frankfurt am Main, 1986 S. 620, 672; cited in: Sabina Becker, Literary and cultural studies, their methods and theories. Reinbek, 2007.

Thus, it would be of interest to examine to what extent the theories established for literature apply to the interpretation of patents. To do this across the board would be too large a task, so we will confine ourselves to considering the interpretation of patents in infringement proceedings. This will be done for Germany and the USA. It should be noted that even under these constraints a complete analysis is out of the question. The present paper is necessarily somewhat anecdotal.

The following procedure will be applied: first, different literary theories, schools or practices will be introduced generally, in line with the approach of *Becker*<sup>4</sup>, which is accepted as the standard.

Then - taking into account the numerous fine points of patent law and the reception of patents and patent claims - these theories will be restricted to a few different basic concepts essentially in line with the literary stages of Eagleton:<sup>5</sup>

"Indeed one might very roughly periodize the history of modern literary theory in three stages: a preoccupation with the author (Romanticism and the nineteenth century); an exclusive concern with the text (New Criticism); and a marked shift of attention to the reader over recent years."

Based on the case law on patent infringement in Germany and the USA, we will then try to match the broad outline of the relevant judgments of each with one these theories.

# 1. Brief discussion of various approaches in literary theory

Following Becker<sup>6</sup>, we can distinguish essentially nineteen different approaches to literature, which will be briefly presented in what follows, both by subdivision and in the summary according to Becker<sup>7</sup>.

Sabina Becker, Literary and cultural studies, their methods and theories. Reinbek, 2007.

Eagleton, Terry, Introduction to Literary Theory, 3rd edition, Stuttgart, 1994 [1988] / Literary Theory: An Introduction (Oxford: Blackwell, 1983), p. 74, cited in Becker, above. She, however, rejects this view of Eagleton as already obsolete, see. *Becker, S.* 18

# 1. The hermeneutic practice of interpretation

In the hermeneutic practice, the emphasis is placed on an "adequate interpretation" of the meaning of a text intended by the author. This is: 8

- in line with the concept [hermeneutics] which goes back to Hermes, the messenger of the gods - this approach involves opening up the meaning of a text intended by the author. Equating the author's intention with the messages of the gods tethers the hermeneutic act of understanding to the practice of interpretation and thus at the same time to the search for the meaning of texts.

According to Dilthey (as read by Becker<sup>10</sup>) in hermeneutics

capturing the intellectual greatness of the author is the true goal of the interpretive process.

## 2. Positivism in literary theory

This 19th Century movement had the stated aim 11

of introducing into the humanities the laws of the natural sciences, i.e. the new practices honed in the natural sciences.

This was to be done primarily through the study of the author. In this context, Becker cites the French positivist Hyppolyte Taine:

Note.: The following is more or less a summary of the already mentioned book by Becker; however it was written in order to make the text understand- and readable without consulting secondary sources.

<sup>7</sup> Becker, above.

Becker above. Chapter 1, original: "- so legt es der auf den Götterbote Hermes zurückgehende Begriff [der Hermeneutik] nahe – diejenige, die den vom Autor intendierten Sinn eines Textes erschließt. Die Gleichsetzung der Autorintention mit der Botschaft der Götter legt den hermeneutischen Verstehensakt auf die Praxis der Auslegung und somit zugleich auf die Suche nach dem Sinn von Texten fest"

S. Becker, above. Chapter 1, original: "das Aufspüren der geistigen Größe des Autors das eigentliche Ziel des Auslegungsprozesses"

Wilhelm Dilthey: The emergence of hermeneutics (1900) in Collected Writings, vol.5, 4th edition, Stuttgart, Göttingen, p. 317-338, cited in Becker, Chapter 1

Becker above. Chapter 2, original: "in die Geisteswissenschaften die Gesetzmäßigkeiten der Naturwissenschaften, d.h. neue naturwissenschaftlich grundierten Verfahrensweisen zu integrieren" / ",, Um Balzac zu verstehen und beurteilen zu können, muß man sein Temperament und sein Leben kennen"

In order to be able to understand and assess Balzac, one must know his temperament and his life.

## 3. Intellectual history/history of ideas

The intellectual history movement arose at least in part as a counterblast to positivism. Its starting point is 12

the assumption of an intrinsic intellectual status of literature which cannot be reached through the evaluation of positive, tangible facts; consequently, the value and the importance of literature can only be adequately grasped by approaching these factors of the intellectual realm. Literature is an expression of the mind.

Despite the rejection of positivism, the author still remains the primary subject of the investigation:

Following the arguments of Dilthey, a theory of literature based on the history of ideas is concerned with the description of the work of art on the basis of understanding and the intuitive capturing of the author's feeling for, and view of, life, and this understanding is also linked to the spiritual capacity of the reader for experience. The question of the formal nature of texts is provisionally secondary.

## 4. Structuralism

This movement, primarily made up of Russian and Czech humanities scholars at the beginning of the last century and into the 1920s, differs fundamentally from the three previously discussed. Instead of the intention of the author, the structure (even the formal structure) of texts is placed in the foreground and becomes the primary subject of investigation. Becker<sup>13</sup> writes:

Becker above. Chapter 3, original: "die Annahme einer geistigen Eigenqualität von Literatur, die über die Auswertung positiver, greifbarer Fakten nicht zu erschließen ist; folglich sind auch der Stellenwert und die Bedeutung von Literatur adäquat nur über die Annäherung an diese Momente des Geistigen zu fassen. Literatur ist Ausdruck des Geistes." | "Im Anschluss an Überlegungen Diltheys geht es einer geistesgeschichtlichen Literaturvissenschaft um die Beschreibung des Kunstwerks auf der Basis von Verstehen und intuitivem Erfassen des Lebensgefühls und der Lebensauffassung des Autors, wobei dieses Verstehen auch an die seelische Erlebnisfähigkeit des Lesers gebunden wird. Die Frage nach der formalen Beschaffenheit von Texten ist dabei zunächst sekundär"

Becker above, Chapter 4, original: "Der Strukturalismus kann insofern als ein antihermeneutischer Ansatz bezeichnet werden, als er nicht in erster Linie nach dem Sinn der literarischen Texte und der Bedeutung der Zeichen fragt, sondern auf die Beziehung der Zeichen untereinander. Statt seine Aufmerksamkeit auf das Signifikat (= das Bezeichnete, die Inhaltsseite des sprachlichen Zeichens) zu lenken, betrachtet er den Signifikanten (= das Bezeichnende, die

Structuralism can be called an antihermeneutic approach to the extent that it does not ask in the first place about the meaning of literary texts and the meaning of the signs, but about the relationship of the signs to each other. Instead of focusing on the signified (= the meaning, the content side of the linguistic sign), it considers the signifier (= the meaning-carrier, the expressive side of the linguistic sign)

and

Structuralism accordingly describes literary texts primarily as a regulatory system of signs and focuses the analysis on the regularities underlying and their structure, whose unity they represent.

The "linguistic turn", which began with structuralism, ultimately led to the proclamation of the "death of the author" in the sixties of the last century.

## 5. Interpretation immanent to the work

This "most fruitful"<sup>15</sup> strand in the 1950s and 1960s, especially in Germany, was based on the premises of the unity and autonomy of the work of art, which must be read and understood in itself. Becker writes:

Although questions about the background to literature in the history of ideas and thought play a role, the central focus is on the linguistic and stylistic dimensions of a work; primarily based on positions and objectives in the history of style, the interpretation of texts through linguistic and formal, compositional and structural aspects (composition, structure, style and metre, freedom of speech and expression, tropes, genre issues) is the declared intellectual objective of an interpretation immanent to the work. The work is to be studied as it is in itself.

Ausdrucksseite des sprachlichen Zeichens" / "Der Strukturalismus beschreibt literarische Texte dementsprechend vor allem als ein Regelsystem von Zeichen und konzentriert die Analyse auf die den Texten zugrunde liegenden Gesetzmäßigkeiten, auf ihre Struktur, deren Einheit sie sind"

Barthes, Roland (2000): Death of the Author [1968] Reprinted in: Texts on the Theory of Authorship, ed. by Fotis Jannidis, Gerhard Lauer, Matias Martinez and Simone Winko, Stuttgart, p. 185-198 (cited in Becker, above).

Becker, above. Chapter 5, also the following quotation, originally: "Zwar spielen auch Fragen nach dem ideen- und geistesgeschichtlichen Hintergrund von Literatur eine Rolle; im Zentrum aber stehen sprachliche und stilistische Dimensionen eines Werks; vornehmlich an Positionen und Zielsetzungen der Stilgeschichte anschließend ist die Deutung von Texten über sprachliche und formale, kompositorische und strukturale Gesichtspunkte (Aufbau, Struktur, Stil und Metrik, Rede- und Ausdrucksformen, Tropen, Gattungsfragen) das erklärte Erkenntnisinteresse der Werkimmanenz. Das Werk soll aus sich heraus erfasst werden."

In the Anglo (American) area there was a similar movement, the so-called "New Criticism", which however has never had the fundamental importance which the immanent interpretation has been able to achieve over the years in Germany, possibly as a reaction against the recent Nazi past.

## 6. Social and cultural-historical approaches

This approach to the interpretation of the work, primarily resulting from the sixties of the last century, rejects the focus on immanence, which argued that a work is completely "autonomous," and instead emphasising the contrary aspects. The immanent interpretation and the social or cultural and historical interpretation are thus more or less opposites. Becker<sup>16</sup> writes:

Social-historical approaches to literature rely on the recognition originally by Herder and formulated in the context of the Sturm und Drang movement that every literary text is a historical product, whose origin is linked to the respective historical and social as well as cultural and historical context.

and

Above all, literary analysis now focuses on the exposure of the references of literature to its social and historical environment. This is not about achieving the reconstruction of historical processes through literature, but rather literature is to be described in its historicity.

## 7. Reception and effective aesthetic perspectives

This reader-centered approach largely arose at the University of Konstanz in the 1970s, as the so-called "Konstanz School". On this approach, the previous consideration

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Becker, above. Chapter 6, originally "Sozialgeschichtliche Zugänge zur Literatur greisen die von Herder stammende und im Umfeld der Sturm- und Drang-Bewegung sormulierte Erkenntnis auf, dass jeder literarische Text ein geschichtliches Produkt sei, dessen Entstehung an den jeweiligen historischen und sozial- wie auch kulturgeschichtlichen Kontext gebunden ist" / "Vor allem zielt die literaturwissenschastliche Analyse nun auf die Freilegung der Bezüge von Literatur zu ihrem gesellschastlichen und historischen Entstehungsumseld. Hierbei geht es nicht darum, mittels Literatur die Rekonstruktion historischer Prozesse vorzunehmen, stattdessen ist sie in ihrer Historizität zu beschreiben"

is to some extent "reversed", i.e. instead of the *author* or the *work*, the main focus is on the *reader*. Becker<sup>17</sup> writes:

The basic idea [of this method] is the assumption that a text primarily is constituted by its reception process as a literary work, its "sense" and its peculiarity i.e. by the "process of experience" [...] of the reader. The work only unfolds its real fullness of meaning and polyvalency (multiplicity of meaning) [...] in the "progressive aisthesis" [perception]. Only in the "act of interpretive reading" can the work pass beyond "the horizon of its creation" [...]. The meaning of literary works is therefore made specific, according to the aesthetics of reception, in the "act of reading" [...]; this is not fixed and is thus historically variable and changeable.

## 8. System-theoretical literary theory

System theory emerged in the 1980s and was initially a sociological concept. Becker<sup>18</sup> writes:

Following paradigms from sociology, system-theoretical models consider the relationship between society and literature, regarding the latter as a system of social life and activity, but also as a system of communication. Literary texts are then seen as part of this system, but their interpretation is to be sought in more than just an analysis in the context of the system of communication as art.

and

Starting from the assumption of ordered structures and control mechanisms, systems theory approaches shift the analytical focus onto the differentiation of art as a specifically governed sphere and onto the anchoring of (literary) texts within this system of art.

Becker, above. Chapter 7, originally "Ihr Grundgedanke [dieser Methodik] ist die Annahme, dass ein Text sich vornehmlich im Rezeptionsprozess als ein literarisches Werk konstituiert, sein "Sinn" und seine Eigentümlichkeit also im "Prozess der Erfahrung" [...] des Lesers zum Tragen kommt. Das Werk entfalte [...] erst in der "fortschreitenden Aisthesis" [Wahrnehmung] seine eigentliche Bedeutungsfülle und Polyvalenz (Mehrdeutigkeit). Nur im "Akt des verstehenden Lesens" könne das Werk "den Horizont seiner Entstehung" überschreiten [...]. Der Sinn literarischer Werke konkretisiert sich der Rezeptionsästhetik zufolge also im "Akt des Lesens" [...]; dieser ist aber nicht fixiert, ist mithin bistorisch variabel und veränderbar."

Becker, above. Chapter 8, originally "Im Anschluss an Paradigmen der Soziologie nehmen systemtheoretische Modelle das Verhältnis von Gesellschaft und Literatur in den Blick, wobei sie letztere als ein Sozial- und Handlungssystem, aber auch als ein Kommunikationssystem verstehen. Literarische Texte werden sodann als Bestandteil dieses Systems begriffen, ihre Interpretation ist aber nur mehr als eine Analyse im Rahmen des Kommunikationssystems Kunst zu realisieren" / "Ausgehend von der Annahme übergeordneter Strukturen und Regelmechanismen, verlagern systemtheoretische Ansätze den analytischen Schwerpunkt auf die Ausdifferenzierung von Kunst als eines spezifisch geregelten Bereichs und auf die Verortung von (literarischen) Texten innerhalb dieses Systems Kunst."

As mentioned above, however, literature and art are largely classified as "autonomous", i.e. as systems that have "no other purpose than themselves".

# 9. Psychology of literature/Literary theory by psychoanalysis

The literary psychological approach can be regarded as a further development or redefinition of the hermeneutics already introduced in 1. Becker<sup>19</sup> writes

The starting point is the insight that the "interpretations of works of art, if they are correct, always directly or indirectly relate to psychological processes" [...] On the basis of this thesis, the psychology of literature treats the work of art primarily as the result of mental processes and factors and so first of all as the mental product of an individual or of specific individual circumstances.

and

To be sure, a literary psychological method treats a literary text first as the result of the action, i.e. the feelings and experiences of its author. A reading of texts aligned in this way, based on Freud, accordingly applies psychoanalysis to literary texts and explores the unconscious feelings, desires and impulses of the characters and thus also of the author [...]

## 10. Feminist literary theory

Feminist literary theory can be roughly divided into several phases according to Becker<sup>20</sup>. In the first phase, the task was to collect, archive and systematise literature written by women. This was followed by a second phase in which the concentration was

Becker, above. Chapter 9, "Ausgangspunkt ist die Einsicht, dass die "Interpretation von Kunstwerken, wenn sie korrekt sind, sich immer direkt oder indirekt auf psychologische Prozesse beziehen" [...] An diese These anschließend betrachtet die Literaturpsychologie Kunstwerke primär als das Resultat psychischer Abläufe und Faktoren und so zunächst einmal als das psychische Produkt eines Individuums bzw. einer spezifischen individuellen Lebenssituation" / Sicher versteht eine literaturpsychologische Methode den literarischen Text zunächst als das Resultat der Handlung, also der Gefühle und Erfahrungen seines Autors. Eine so ausgerichtete, an Freud anschließende Textlektüre wendet dementsprechend die Psychoanalyse auf literarische Texte an und fragt nach den unbewussten Gefühlen, Sehnsüchten und Trieben der Figur und somit auch des Autors [...]"

Becker, above. Chapter 10, also the following quotations, originally: "sich auf die Erweiterung des geltenden (männlich ausgerichteten) literarischen Kanons und eben die Erarbeitung eines "Gegenkanons" [konzentrierte]."/
"fokussiert die feministische Literaturwissenschaft einen Themenkomplex [...]: Die Analyse von Literatur immanenten Weiblichkeitsbildern und Repräsentationsformen des Weiblichen"

on the expansion of the existing (male-oriented) literary canon and even the development of a "counter-canon".

Also

feminist literary theory focuses on a set of topics [...]: The analysis of images of femininity and forms of representation of the female immanent in literature [...]

In the following years, the focus has continued to fan out and several themes have come to the fore, which became known as "gender studies."

### 11. Gender Studies

Gender Studies can be looked at as a development and expansion of feminist literary studies. In them

the categories of both the feminine and the masculine [...] are described as historically changeable social and cultural constructs.<sup>21</sup>

and literary texts are interpreted on the basis of this premise.

## 12. Poststructuralism/deconstruction

Deconstruction,

most prominently represented by the French philosopher Jacques Derrida, turns against [...] logocentrism and rejects the concepts of wholeness, unity and connection inherent in any unifying approach, based on rational thought. <sup>22</sup>

Becker, above. Chapter 11, originally: "sowohl die Kategorie des Weiblichen als auch des Mänlichen […] als historisch wandelbares gesellschaftliches und kulturelles Konstrukt beschrieben."

Becker, above, Chapter 12, originally: "am prominentesten vertreten durch den französischen Philosophen Jacques Derrida, wendet sich gegen den [...] Logozentrismus und verabschiedet die Vorstellungen von Ganzheit, Einheit und Zusammenhang, die jenem vereinheitlichenden, auf Vernunft zielenden Denken innewohnen." / "arbeiten stattdessen daran, Offenheit und Nicht-Zusammenhang der Werke aufzuzeigen, das heißt, sie legen die Heterogenität, die Aporien und die Unbestimmtheiten der [...] textuellen Konstruktionen frei, "nehmen sie auseinander", um die ihnen zu Grunde liegende Konstruiertheit hervorzukehren. In diesem Prozess des Auseinandernehmens werden die einzelnen Elemente verschoben, neu zusammengesetzt und kombiniert, sie werden aus ihrem vorgegebenen Kontext herausgelöst und in einem neuen Kontext

#### Deconstructive methods

work instead on highlighting the openness and context freedom of literary works, that is, they disclose the heterogeneity, aporias and uncertainties of the [...] textual constructions, "take them apart", in order to bring out the element of construction underlying them.

In this process of disassembling the individual elements are moved, reassembled and combined, they are taken out of their given context and fitted into a new context. Destruction and construction are equally important components in the concept of deconstruction.

## The key idea is that:

Outside the system of sequentially referential signifiers, on Derrida's approach, there is no central point, no original signified, and therefore no "privileged" reading, which is able to bring to rest this process of deleting and shifting the meanings. Signifiers always refer to other signifiers, the "game of designating has no end" [...]

According to the so-called "Yale Critics" school, this leads to the conclusion that:

An intention, an originally unintended sense, a uniform interpretation are solely the effect of subsequent reading and are therefore not immanent in the text, but assigned to it from the outside [...]

Becker refers, in this context, to the parallels with reception aesthetics (see point

### 13. Intertextuality

7).

The core of the concept of intertextuality is the relationship of texts to other texts:

eingepasst. Destruktion und Konstruktion sind gleichermaßen Bestandteile im Begriff der Dekonstruktion." / "Ausserhalb des Systems aufeinander verweisender Signifikanten, so Derridas Denkansatz, existiert kein Punkt, kein ursprüngliches Signifikat und damit auch keine "privilegierte" Lektüre, die diesen Prozess des Ausstreichens und Verschiebens der Bedeutungen stillzustehen vermögen. Immer verweisen Signifikanten auf andere Signifikanten, geht das "Spiel des Bezeichnens ins Unendliche" / "Eine Absicht, ein ursprünglich intendierter Sinn, eine einheitliche Lesart sind einzig der Effekt der nachträglichen Lektüre, sie sind folglich nicht dem Text immanent, sondern ihm von außen zugewiesen"

By this process of relating a text to one or more others, the source text gains another dimension; it now has the character of a sequential text that refers to a text or several prior pretexts.<sup>23</sup>

Taken to the extreme, this concept becomes the proverbial "death of the author"<sup>24</sup>, because

The text is a tissue of quotations drawn from innumerable centres of the culture. The writer can always only imitate a gesture which has already taken place and is never original.

# 14. Literary theory by discourse analysis

In discourse analysis - as with deconstruction - the primary objective is not to understand the meaning of a text from the perspective of the author or the text itself. Instead, the so-called discourse is in the foreground. Here discourses are understood, for example by Foucault, who has decisively influenced this approach, as

"A set of statements, which belong to the same formation system".25

#### Becker writes:

Foucault, cited in Becker

Discourses constitute "subject areas" of speech, within which "true or false statements can be made or denied"<sup>26</sup>. In this sense they are knowledge formations that make it possible to make statements about a topic. So the thinking and perception of humans are not thought to be autonomous, but always governed by certain rules of discourse. Discourses determine which items are perceived at which times and in which ways and how they are thought and talked about.

The discourses themselves are not arbitrary, but subject to rules, because

Becker, above. Chapter 13, originally "Durch dieses Ins-Verhältnis-Setzen eines Textes zu einem oder mehreren anderen gewinnt der Ausgangstext eine weitere Dimension: Ihm eignet nun der Charakter eines Folgetextes, der sich auf einen Text oder mehrere vorgängliche Prätexte bezieht"

Barthes, above. cited in Becker, Chapter 13, the following quotation is also Barthes, quoted by Becker, originally "Der Text ist ein Gewebe von Zitaten aus unzähligen Stätten der Kultur. Der Schreiber kann nur eine immer schon geschehene, niemals originelle Geste nachahmen"

Foucault, cited in Becker, above. Chapter 14, also the following quotations, originally "Menge von Aussagen, die einem gleichen Formationssystem zugehören" / "Diskurse konstituieren "Gegenstandsbereiche" des Sprechens, innerhalb derer "wahre oder falsche Aussagen behauptet oder verneint werden können" In diesem Sinn sind sie Wissensformationen, die es ermöglichen, Aussagen zu einem Thema zu machen. Damit erscheinen das Denken und die Wahrnehmung der Menschen nicht als autonom, sondern immer schon geprägt durch bestimmte Diskursordnungen. Die Diskurse bestimmen, welche Gegenstände zu welcher Zeit in welcher Weise wahrgenommen und wie über sie gedacht und gesprochen wird." / "nicht jeder [hat] das Recht und die Möglichkeit, jederzeit und überall alles zu sagen."

not everyone [has] the right and opportunity to say everything at any time and anywhere.

Thus, in discourse analysis the text and its origin are the focus in the light of ongoing discourses and their rules. The author is only one part of the discourse (albeit an important one). Discourse analysis is thus not restricted to pure textual analysis but also includes sociological and political aspects.

## 15. Literary theory by cultural studies

In literary theory by cultural studies - unlike the previous approaches - the author is again more in the foreground, albeit not as an individual but rather as a "product of his time". Becker writes:

Rather the intention is to construe literature and literary works as cultural documents, for which the individual author as the author of a text is only of secondary importance [...] [One] no longer understands the work - in line with discourse analysis - as the result of an individual production process or even an individual act of creation. Instead, one reads or describes the literary text as the product of cultural contexts. <sup>27</sup>

# 16. Literary semiotics

Semiotics is the study of signs, in which in particular literary signs have a status of their own, such that they often have a multiplicity of meanings. A semiotic approach to literature has the task:

of reconstructing the structure of alienation, multiple meanings and references. It presupposes the polyvalent structure of literary texts and treats literature as a polyphonic, polyisotopic form of speech. Own the signs used in it, i.e. the assumption and reference character, refer to something

Becker, above, Chapter 15, originally: "Vielmehr will man Literatur und literarische Werke als kulturelle Dokumente fassen, für die der einzelne Autor als Verfasser eines Textes nur mehr von sekundärer Bedeutung ist [...] [Man] versteht – hieran an die Diskursanalyse anschließend – das Werk nicht mehr als das Ergebnis eines individuellen Produktionsprozesses oder gar als einen individuellen Schöpfungsakt. Stattdessen liest oder beschreibt man den literarischen Text als das Produkt der kulturellen Kontexte."

else, something absent [...] This something absent, but still named, is what a literary-semiotic analysis tries to expose. <sup>28</sup>

#### 17. New Historicism

New Historicism was developed in the 1980s by Stephen Greenblatt and follows a approach similar to the cultural studies approach already described in point 15, but incorporating approaches from discourse analysis (see point 14). As a result, texts are considered part of the culture - to be disclosed in turn primarily through texts. "Texts" here means not only literary works, but also, for example, legal, medical and scientific treatises.

## 18. Approaches from literary anthropology

Literary anthropology originated from the turn of literary studies towards cultural studies and the interdisciplinary approach of modern literary studies. Becker writes: <sup>29</sup>

Literary anthropology focuses on anthropology in literature, i.e. conceives literature itself as an anthropological fact, as an "anthropologicum". It asks about the ways of life, thinking and perceptions that have formed in a society in connection with historical processes.

## 19. Approaches from cultural sociology and the history of world views

This approach originated from discourse analysis, but includes a socialogical lens on culture. An important representative is Pierre Bourdieu, who:

starts from the assumption that social but also literary practice is always the interplay of "field" and "habitus". Hence, according to him, within the literary theory or at least the sociological

Becker, above, Chapter 16. originally: "die Struktur von Verfremdungen, Mehrfachbedeutungen und Verweise zu rekonstruieren. Sie geht von der polyvalenten Struktur literarischer Texte aus und behandelt Literatur als eine mehrstimmige, polyisotope Rede. Die in ihr verwendeten Zeichen besitzen, so die Annahme, Referenzcharakter, d.h. sie verweisen auf etwas Anderes, Abwesendes [...] Dieses Abwesende, aber dennoch Benannte versucht eine literatursemiotische Analyse freizulegen. "Note: Becker also discusses cultural semiotics in this chapter, which we will not consider further.

Becker, above, Chapter 18. originally: "Literaturanthropologie zielt auf das Anthropologische in Literatur, begreift also Literatur selbst als ein anthropologisches Faktum, als "Anthropologikum". Sie fragt nach den Lebensformen, Denk- und Wahrnehmungsweisen, die sich in einer Gesellschaft in Verbindung mit historischen Prozessen ausgebildet haben."

analysis of literature the production and reception-aesthetic conditions of literary creation must be primarily examined; for the understanding of literature requires a thorough knowledge and presentation of the "field" in which it is created. <sup>30</sup>

However, it is not so much the individual author that is in the foreground, but the interaction of "literary practices" with other sectors of society.

# 2. Superordinate approaches and transfer to patent law

To investigate whether and how the above-mentioned approaches can apply to the interpretation of patents, it appears advantageous, in turn, to cluster the nineteen methods and theories into groups. On a very rough subdivision, in line with the above quotation from Eagleton, it is possible to form four groups:

## I. Theories which place the author in the foreground.

These primarily include the hermeneutic practice of interpretation, literary positivism and the history of thought/ideas. It is true that the individual theories differ fundamentally in some aspects and in particular the history of ideas<sup>31</sup>

is partly as a response to the positivist understanding of texts with reference to biographical and other data relating to the person of the author.

Nevertheless, the predominant position of the author is intrinsic to all of these theories.

## II. Theories that put the text in the foreground

These are mainly structuralism, immanent interpretation, and literary and cultural semiotics. Structuralism arose from a linguistic basis and

Becker, above, Chapter 19. originally: "von der Annahme ausgeht, dass die gesellschaftliche aber auch die literarische Praxis immer das Zusammenspiel von "Feld" und "Habitus" ist. Von daher müssen ihm zufolge innerhalb der literaturwissenschaftlichen oder zumindest literatursoziologischen Analyse primär die produktions- und rezeptionsästhetischen Konditionen literarischen Schaffens untersucht werden; denn das Verständnis von Literatur bedarf einer genauen Kenntnis und Darstellung des "Feldes", in dem Erstere entsteht."

cited in Becker, above. Chapter 3, originally ,, ist zum einen eine Reaktion auf das positivistische Verständnis von Texten unter Bezugnahme auf biographische und sonstige die Person des Autors betreffende Daten"

can be called an anti-hermeneutic approach to that extent that it does not ask in the first place about the meaning of literary texts and the meaning of the signs, but about the relationship of the signs with each other. <sup>32</sup>

Probably the most stringent and compelling approach is the immanent interpretation, which - as already discussed above - considers the text only as "text in itself".

## III. Hypotheses that bring the reader to the fore

The most prominent representative of this approach is the reception and effect aesthetics discussed above.

### IV. Other theories

These comprise all other theories - even if these theories are fundamentally different from each other. These are not discussed further. This follows, on the one hand, from the fact that their transferability to the analysis of patents seemed too farfetched (as in the case of Psychoanalytic and Feminist Literature) and, on the other hand, from the fact that it would easily overstretch the scope of this article at least in respect of discourse analysis or system theory.

As a digression, however, it should be noted that at least a discourse-analytic assessment would be worth the effort. Even at first glance, there are many interesting questions, such as:

- How has the fact that virtually all patents are written by specialised professionals affected the interpretation and complexity of patents? The very first German patent, a chemical patent, had only two paragraphs of text and not even one claim; this was indeed not unusual at the time, even if the second patent already included a claim. Such patents in the field of chemistry are today usually at least ten pages long, often they comprise several dozen pages.

Becker, above. Chapter 4, originally "kann insoweit als ein antihermeneutischer Ansatz bezeichnet werden, als er nicht in erster Linie nach dem Sinn der literarischen Texte und der Bedeutung der Zeichen frage, sondern nach der Beziehung der Zeichen untereinander."

- In this context: Why has the specialised profession of patent attorney emerged? Who was here the "chicken" or the "egg"? Were the first patent attorneys those clever enough to, in collusion with the offices and courts, increase the complexity of patents over time to make things harder for non-professionals? Or did the requirements for the drafting of patents first increase due to complexity inherent in the objectives of the patent system, which then required as a kind of necessity that a specialist profession be set up? For Germany the second alternative seems historically to be the dominant view (as shown, in particular, by the genesis and justification of the law on patent attorneys of 1900<sup>34</sup>). What is the situation in other countries?
- What is the effect of the fact that in the UK (for example) the vast majority of patents from which an infringement action arises were not originally written in the UK in contrast to Germany or the USA where such patents are more likely to have originated and been drafted in Germany or the USA, respectively?

All these questions are in my opinion very interesting and I would be glad if they were to be more extensively studied and published.

# 3. Conclusions for the interpretation of patents

What conclusions can be drawn from the previous three "super theories"? The following points would seem to be pertinent:

If the **author** is in the foreground, then

 the proceedings for the grant of the patent and perhaps even the history of the invention should have a major impact on the analysis and the scope of the patent,

The famous quote of G.B. Shaw, "All professions are conspiracies against the laity." immediately comes to mind.

See on this the "special edition" of the *Mitteilungen* of 4.5.2000 to mark the centenary of the first law on patent attorneys in Germany

- inconsistencies in the patent, such as different names for an object (such as a "holder" or "fastener" for the same object in the field of mechanical engineering or a "plasticizer" and a "surfactant" for the same component in the field of chemistry), by contrast, should have less impact, since the intention of the author is more essential,
- disclosure gaps in the patent should to a certain extent be "remediable" if it can be assumed that the "author" (= inventor?) would clearly have supplemented them if asked.

# If the **text** is in the foreground, then

- the procedure for the grant of the patent should only in exceptional cases, and the history of the invention never, affect the analysis and the scope of the patent,
- inconsistencies and gaps in the patent disclosure, on the other hand, should have serious consequences and relatively quickly lead to the invalidity of the patent.

# If the reader of the patent is in the foreground, then

- the knowledge of the reader should have an impact on the scope of the patent,
- the procedure for the grant of the patent should only in exceptional cases, and the legislative history of the invention never, affect the analysis and the scope of the patent,
- inconsistencies and gaps in the patent disclosure should (only) have consequences if the reader recognises them but, does not feel able unambiguously and straightforwardly to remedy them.

In the case of the dominance of the reader, the scope of patent protection would not be universal, but would have to be assessed differently in each case of infringement. This is unacceptable for a patent as the object of a legal act and part of the legal system. It has therefore long been the tradition of all major patent jurisdictions that the patent does not address a specifically nameable person, but rather the reader of the patent is the person-skilled-in-the-art (as such), who is thus necessarily a legal fiction, the PHOSITA<sup>35</sup>. So there is always only one reader of a patent - which reduces reception analytical approaches to absurdity. If only one hypothetical reader is allowed, it is pointless to ask what different reactions the same work will trigger in different readers.

The fact that the person-skilled-in-the-art, the PHOSITA (precisely because he or she is merely hypothetical and thus does not exist) and his knowledge and reception in the event of dispute are the subject of particularly vehement altercations does not in any way change the fact that theories which put the reader in the foreground and centre of the analysis cannot be used in patent law. Nor does it matter that - at least in some areas of technology - the definition and the skill of the person-skilled-in-the-art has over the years been subject to sometimes violent fluctuations.

# 4. The situation in Germany

Based on several important decisions handed down in recent years, the major principles of interpretation in this regard have been laid down by the German High Court (Bundesgerichtshof) and this has supported the long established practice.<sup>36</sup>

It was found in the 2002 "Kunststoffrohrteil" decision<sup>37</sup>, sometimes referred to as the "plastic pipe" decision, that the grant or prosecution history of a patent is in principle irrelevant to the interpretation of the scope. In this specific case, from the fact that the applicant had restricted himself in a number range, it could not be inferred that he had waived the "intermediate zone" between the original and the new number range.

<sup>35</sup> see for the German situation Busse/Keukenschrijver, Commentary on § 4 from marginal 123

see on this also *Kühnen*, IIC 2012, 664, referring to the "Kunststoffrohrteil"-decision.
 BGH, judgement of 12. 3. 2002 - X ZR 43/01 (Kunststoffrohrteil), IIC 2002, 511

Under the "Strassenkehrmaschine" decision<sup>38</sup> of 2009, which itself refers to the "Momentanpol" decision<sup>39</sup> in utility model law, a granted patent even has the status of a legal standard and should be interpreted by the Court to that effect.

Looking at these three decisions suggests an interpretation of patents immanent to the work. Author-centered interpretations can be ruled out because these decision make it unequivocally clear that the prosecution history (which is essentially determined by the patentee/author) has no effect on the interpretation of a patent and that interpretation is for the court and not the patentee. This can be supplemented by something that the author of this paper can confirm from his practice, namely that in the grant procedure before the DPMA, 40 and especially before the EPO, the emphasis is strictly on rigour and conceptual uniformity when addressing technical terms<sup>41</sup>. These are both principles that are also demanded by an interpretation of a literary text immanent to the work.

However, two further decisions should be considered which - at least prima facie - do not support this work-centered approach and so must be looked at in more detail. These are the "Weichvorrichtung II" decision and the "Occlusionsvorrichtung" decision.

# 1) The "Weichvorrichtung II" decision

In this decision<sup>42</sup> from the year 1997, a patent holder had declared to his opponent in opposition proceedings that he would waive the enforcement of his patent against a particular embodiment. However, he later filed an infringement action against the exclusive licensee of the opponent on the basis of this embodiment.

The German High Court ruled that the action should be dismissed on grounds of good faith; the defendant was entitled to be confident that the declaration of the proprietor to the former opponent (that he would waive all claims against the relevant

 $<sup>^{38}</sup>$  BGH, decision of 8. 7. 2008 - X ZB 6.13 - Momentanpol, Mitt 2008, 455  $^{39}$  BGH,. of 31 March 2009 - X ZR 95/05, Mitt. 2009,283  $^{40}$  Deutsche Patent- und Markenamt, German Patent and Trade Mark Office.

<sup>&</sup>lt;sup>41</sup> see Examination Guidelines of the EPO, Part C, 4.14: "Terminology and signs shall be uniform throughout the application...."

<sup>&</sup>lt;sup>42</sup> BGH, Mitt. 1997, 364, 366, f. - Weichvorrichtung II

embodiment) was still valid. This applied not only to the opponent, but also to the licensee.

At first glance, this decision thus seems to contradict the idea of immanence to the work, since the applicant's statements in this case led to the fact that the infringement suit was dismissed. On closer inspection, however, this is not a contradiction.<sup>43</sup>

The judgement was given not because the applicant had indicated exclusively to the opponent that this or any other embodiment was not covered by the patent. Rather, the applicant had arbitrarily restricted his right to enforce, which may be regarded as a kind of "free licence by waiver". Even in the event of a literal infringement, the patent owner is at liberty to waive a claim. It is a cast-iron principle of civil law that no one is compelled to enforce his claims. That the patentee in this case, in hindsight, was a bit unhappy with his previous decision in the opposition proceedings is a reasonable supposition, but after such a definite undertaking, the defendant was entitled to rely on the patentee's word. Thus, this judgement was a matter of general law rather than based on the principles of interpretation of the claims of patents.

# 2) The "Occlusionsvorrichtung" decision

This recent decision<sup>44</sup>, according to Kühnen<sup>45</sup>, has

sparked debate about whether use may be made of the contents of the grant file for the determination of scope

and must therefore be limited or distinguished, because otherwise the thesis of immanent interpretation would be ruled out. As a result, however, no tendency to use the grant file

<sup>&</sup>lt;sup>43</sup> see on this also the already mentioned article by *Kühnen*, IIC 2012, 664, who also quotes other similar judgments

BGH, judgement of 10 May 2011 - X ZR 16.09 - Mitt. 2011, 355

Kühnen, IIC 2012, 664, supra. originally "Diskussion darüber entfacht, ob für die Schutzbereichsbestimmung auf den Inhalt der Erteilungsakte zurückgegriffen werden darf" Note.: Kühnen (also) concludes that the grant file should not be used.

in future can be derived from the decision alone. The guiding principle of the decision reads as follows:<sup>46</sup>

- 1. In the event of contradictions between the claims and the description, those parts of the description which are not reflected in the patent claims will in principle not be included in the scope of patent protection. The description can only be taken into account if it can be read as an illustration of the subject of the claim.
- 2. If the description discloses several ways in which a certain technical effect can be achieved, but only one of these options has been included in the claim, the use of one of the other options does not in principle establish an infringement of the patent by equivalent means.

Thus, this decision is concerned with discrepancies between the description and patent claims, i.e. exclusively inconsistencies in the text itself. The decision, upon a close reading, has nothing to say about any statements made by the patent applicant in the grant procedure.

It could indeed be argued that this decision was in practice a kind of introduction of a "prosecution history estoppel through the back door". This is for the reason that most applications essentially begin with a broad patent claim that covers all embodiments described. In the course of the grant procedure, the claim is then restricted. It may be that not all embodiments fall under the restricted claim and may therefore not constitute an infringement either literally or mutatis mutandis. Thus, the restriction of the applicant would indirectly create a waiver of such embodiments, with effects similar to a "prosecution history estoppel".

Against this conclusion is the fact that, with careful conduct of the review process, the applicant will select his amended claim in such a way that he only excludes from the scope embodiments that are already suggested by the prior art. For this purpose he could not have obtained equivalent protection under prior jurisdiction either.

<sup>&</sup>lt;sup>46</sup> cf. BGH, supra, originally: "1. Bei Widersprüchen zwischen den Patentansprüchen und der Beschreibung sind solche Bestandteile der Beschreibung, die in den Patentansprüchen keinen Niederschlag gefunden haben, grundsätzlich nicht in den Patentschutz einbezogen. Die Beschreibung darf nur insoweit berücksichtigt werden, als sie sich als Erläuterung des Gegenstands des Patentanspruchs lesen lässt.

<sup>2.</sup> Offenbart die Beschreibung mehrere Möglichkeiten, wie eine bestimmte technische Wirkung erzielt werden kann, ist jedoch nur eine dieser Möglichkeiten in den Patentanspruch aufgenommen worden, begründet die Benutzung einer der übrigen Möglichkeiten regelmäßig keine Verletzung des Patents mit äquivalenten Mitteln."

As a corollary, in order for the thesis of immanent interpretation to be maintained, a patent claim could not be interpreted as having an equivalent scope covering embodiments described in the specification that right from the start the claim did not address.

Such cases are in practice by no means so rare. This may be because of bad drafting. It may be because the result of particularly priority claiming practices, as for example with some Japanese applications, several priority application texts may be summarised in a common application, although the claims do not depend on all of the priority texts. Here, there is no "prosecution history estoppel", because the discrepancy was established from the beginning.

So this decision is still in line with an interpretation immanent to the work; the High Court reasoned purely on the basis of the text.

If the evaluation criterion for a "successful text" in the spirit of immanence to the work is that the text is coherent in itself, as was quite common in German studies, even this decision can be seen as an affirmation of the thesis of the immanent practice of interpretation. For in this decision, the High Court determines how inconsistencies (and thus "inferior" or "less successful" texts) are to be interpreted - namely against the applicant. So "successful" applications, in which claims and examples fit like a glove, enjoyed correspondingly higher scope.

### 3) Assessment

The overall assessment remains that the interpretive practice of the High Court can certainly be construed under the principles of immanent interpretation. The grant practices of the DPMA and the EPO are also in line with this.

# 5. The situation in the USA

The basic principles of the interpretation of patent claims have again been described, in particular, by the CAFC in the very detailed Phillips vs. AWH decision<sup>47</sup>. According to that decision, there are several possible sources for the interpretation of the meaning of a claim:

- I. The claims themselves and dependent claims. If, for example, a claim mentions "steel baffles", it can be assumed that "baffles" are usually not necessarily made of steel, because otherwise it would the addition would be redundant.
- II. The description
- III. The prosecution history of the patent.

These sources are regarded as "intrinsic" sources. Of course, "external" sources such as encyclopaedias or testimony can also be cited, but they are usually considered less valuable by the court.

This is also the finding of the somewhat older Vitronics decision<sup>48</sup>.

In US patent law, the prosecution history of a patent is a possible source of knowledge for the interpretation of a patent. This becomes manifest in the "file wrapper estoppel" or "prosecution history estoppel" rule, under which embodiments which the patentee has waived during the examination process are automatically excluded from the scope and also may not constitute equivalent infringement. In addition, the applicant can be held in infringement proceedings to statements made during prosecution about the

CAFC 03-1269, -1286 Edward Phillips et al. vs. AWH Corporation et al, judgement of 12 July 2005

<sup>&</sup>lt;sup>48</sup> CAFC, 96-1058 Vitronics Corp.vs. Conceptronic Inc., judgement of 25 July 1996. This judgement is also cited several times in Phillips vw. AWH.

derived from the "Festo decision" of the US Supreme Court, Festo Corp.. v. Kinzoku Kogyo Kabushiki Co Shoketsu. - 535 US 722 (2002)

thus completely contrary to the attitude of the Bundesgerichtshof in the already cited "Kunststoffrohrteil" decision

interpretation of a particular feature, as confirmed in the Teleflex decision of the CAFC.<sup>51</sup>

Moreover, the prosecution history can also mean that embodiments constituting literal infringements on a normal reading are excluded from the scope of a patent. A particularly good and drastic example is the Biogen vs. GSK decision<sup>52</sup> of the Disctrict Court for the Southern Disctrict of California.<sup>53</sup>

This decision was based on a patent infringement action filed by Biogen (and others) against GlaxoSmithKline (GSK). The basis of the action was a patent which related to an antibody against the so-called CD20 antigen. This antigen has significant pharmaceutical importance, and the same applies to antibodies that specifically bind to this antigen. Biogen had developed an antibody that binds to a specific site of the antigen and been granted a patent with an (initially) very broad protective scope, because neither the binding site nor the structure of the antibody were determined in the claim.

GSK had in turn developed a second antibody, which also very specifically binds to the CD20 antigen, although at a different site. This antibody, and the binding site (even indeed the possibility that there could be several potential binding sites and corresponding antibodies) had not been known at the time of registration of the Biogen patent. In the review procedure, however, Biogen had stated at one point that the term "CD20-antigen-specific" refers to antibodies which would bind to the then known binding site of the "Biogen antibody".

The infringement court, in line with the already cited Teleflex decision, concluded from this that the patent claim is limited to such antibodies, although this limitation was not mentioned in the claim. According to the court, this limitation was precisely what the

Teleflex, Inc. v. Ficosa North America Corp., No. 01-1372 (Fed. Cir. 21 June 2002), according to which (quote) "the prosecution history (or file wrapper) limits the interpretation of claims so as to exclude any interpretation that may have been disclaimed or disavowed during prosecution in order to obtain claim allowance

US District Court for the Southern District of California; case 10-CV-00608 BEN (Gp) of 17 2011, CAFC 2012-1120, cf Colin G Sandercock, Ulrich Storz, Antibody specification beyond the target: claiming a later-generation therapeutic antibody by its target epitope, *Nature Biotechnology* 30, 615–618 (2012).

Remark: At the time of writing of the original article in Summer 2012 the ruling by the CAFC was not yet out, the CAFC later confirmed the case.

patentee had in mind during the prosecution and issue process. Since the GSK antibody indisputably binds to a different binding site, it does not constitute a patent infringement.

On this reading, there is no guarantee of a clear and broad scope of protection corresponding to a clearly worded claim, following restrictive statements or arguments made during prosecution.

On the other hand, the USA is - by comparison - very generous with respect to conceptual uniformity and support through disclosure.

### Assessment

Looking at the cited decisions, a clear preference for the hermeneutic/intellectual history reading of patents can be inferred. This is reflected in the involvement of the patent history on the one hand and the relative tolerance to defects of conceptual uniformity on the other.

The fact that attention will be paid to their utterances has been shown by experience to make patent applicants (or more precisely their lawyers) much more cautious than is the case in Europe or in Germany.

## 6. Predictions for the future

Although the immanent attitude of the German courts has been confirmed by the cited "Kunststoffrohrteil"<sup>54</sup> decision, it could be that the hermeneutic/intellectual history approach of the USA could be changed by the recently adopted "America Invents Act".<sup>55</sup>

This is because the USA - at least formally - is switching from a first to invent (in principle) to a first to file system, even though differences will remain from the European

<sup>&</sup>lt;sup>54</sup> Remark: I have been asked whether the practice of citing US decisions by the parties involved whereas German decisions (in patent cases) are cited by the technical article is in itself not a clear hint to a different interpretation culture. In my opinion this might go a little too far, however, it is interesting that these difference exists.

<sup>55</sup> Remark: The original version of this article was finished in Summer 2012

conception. In a first to invent system, a strong focus on the author/applicant is only natural, because in the end the dispute will be decided by who made the invention and not what was submitted to the Patent Office.

In a first-to-file system, however, the submitted text will just as naturally be more in the foreground, because in the event of doubt it will be decisive for the priority of an invention. The tendency of the German High Court more or less to "snatch" from the patent holder "sovereignty" over the interpretation of his patent, as is indicated in the "Kunststoffrohrteil" decision, is thus the result of an immanent interpretation of the patent text, as also the finding, already hinted at in the "Momentanpol" decision and reaffirmed in the "Strassenkehrmaschine" decision, that a granted patent has the status of a legal standard.

To what extent the change of system in the USA will lead to a change of interpretation in itself, will become apparent in due course. Experience suggests that in a case-law-based legal system, it is almost impossible to make a complete paradigm shift within a short time. Whether such a shift is desirable is another question. Thus, the patent owner will likely have to live with the "two systems" of patent interpretation.

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# SUMMARY

From a comparison of the interpretation history of patent claims in Germany and the USA, on the one hand, and the methods for the interpretation of literature, on the other, it can be said that there are clear parallels between the so-called immanent interpretation approach in literary studies and the German style of patent interpretation. Equally clear are the parallels between the so-called hermeneutic/intellectual history approach and the tradition of patent interpretation in the USA.