

Internal distribution code:

- (A) [-] Publication in OJ
(B) [-] To Chairmen and Members
(C) [-] To Chairmen
(D) [X] No distribution

**Datasheet for the decision
of 19 November 2019**

Case Number: T 0560/16 - 3.3.05
Application Number: 04013256.5
Publication Number: 1465214
IPC: H01F1/11, H01F1/113, C04B35/26,
H01K1/02, G11B5/706, C01G49/00
Language of the proceedings: EN

Title of invention:

Oxide magnetic material, ferrite particle, sintered magnet,
bonded magnet, magnetic recording medium and motor

Patent Proprietor:

TDK Corporation

Opponents:

1. Union Materials Corp.
2. Johnson Electric Engineering Limited

Headword:

TDK/magnetic material

Relevant legal provisions:

RPBA Art. 12(2), 12(4)
EPC Art. 56, 84

Keyword:

Late-filed evidence - submitted with the statement of grounds of appeal - admitted (yes)

Auxiliary requests - admitted (yes)

Inventive step - main request (no) - auxiliary requests 1-4 (no)

Clarity - auxiliary requests 5-9 (no)

Decisions cited:

T 0971/11, T 0047/14, G 0003/14, T 0875/06

Catchword:



Beschwerdekammern
Boards of Appeal
Chambres de recours

Boards of Appeal of the
European Patent Office
Richard-Reitzner-Allee 8
85540 Haar
GERMANY
Tel. +49 (0)89 2399-0
Fax +49 (0)89 2399-4465

Case Number: T 0560/16 - 3.3.05

D E C I S I O N
of Technical Board of Appeal 3.3.05
of 19 November 2019

Appellant 1: Union Materials Corp.
(Opponent 1) 1-85, Wolarm-dong
Dalseo-gu, Taegu, 704-320 (KR)

Representative: Vossius & Partner
Patentanwälte Rechtsanwälte mbB
P.O. Box 86 07 67
81634 München (DE)

Appellant 2: Johnson Electric Engineering Limited
(Opponent 2) A Hong Kong Company of 6/F., Harbour View 1
12 Science Park East Avenue
Hong Kong Science Park, Shatin N.T.
Hong Kong
00000 (CN)

Representative: Ward, David Ian
Marks & Clerk LLP
Alpha Tower
Suffolk Street
Queensway
Birmingham B1 1TT (GB)

Respondent: TDK Corporation
(Patent Proprietor) 13-1, Nihonbashi 1-chome
Chuo-ku,
Tokyo 103-0027 (JP)

Representative: Grünecker Patent- und Rechtsanwälte
PartG mbB
Leopoldstraße 4
80802 München (DE)

Decision under appeal: Interlocutory decision of the Opposition
Division of the European Patent Office posted on
4 January 2016 concerning maintenance of the
European Patent No. 1465214 in amended form.

Composition of the Board:

Chairman E. Bendl
Members: S. Besselmann
O. Loizou

Summary of Facts and Submissions

- I. The present appeals of opponent 1 (appellant 1) and opponent 2 (appellant 2) respectively lie from the interlocutory decision of the opposition division, concerning the two oppositions, to maintain European patent No. 1465214 in amended form, based on the then pending second auxiliary request of 7 December 2015.
- II. The appellants argued, *inter alia*, that the documents, including D13a, D15-D18 and Reference 3 (see the numbering of documents below), which were not admitted into the proceedings by the opposition division, should be taken into consideration by the board.
- III. The patent proprietor (respondent) maintained the set of claims upheld by the opposition division as its main request and filed nine auxiliary requests with its reply to the statements of grounds of appeal.
- IV. The parties cited, *inter alia*, the following documents:
- | | |
|------|--|
| D3 | Smolenskii, G.A. et al., "Investigation of Ferrimagnets with the Structure of Magnetoplumbite and Garnet in Strong Pulse Magnetic Fields", Bull. Acad. Sci. USSR, Phys. Ser. Vol. 25, No. 11, pp. 1405-1408 (1961) |
| D6 | US 5 607 615 A (TAGUCHI HITOSHI [JP] ET AL) 4 March 1997 (1997-03-04) |
| D13a | Excerpt from the Chinese textbook "Hard Ferrite Magnets" (1996), edited by Du Youwei, ISBN: 7-5345-20441-4, and English translation of (a part of) section 8.3 thereof |
| D15 | "Substitutional Effects Induced by Bi and Co in SrFe ₁₂ O ₁₉ ", G. Turilli and F. Licci, J. of |

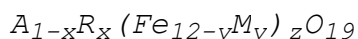
Magnetism and Magnetic Materials 75 (1988)
111-114

- D16 Excerpt from the Japanese textbook
"Development of permanent magnet, analysis of
magnetic circuit and material design, design
application technology", edited by Futahashi
Hiroyuki and published by Technology Center
Co. (1986), ISBN: 4-915560-32-5,
and English translation thereof
- D17 Excerpt from the Japanese textbook
"Electronic Materials Series - Ferrite"
authored by Hiraga Teitarou et al. and
published by Maruzen Co. (1988), ISBN:
4-621-03122-8,
and English translation thereof
- D18 Excerpt from the Japanese textbook "Ceramic
magnetic material" edited by Sakurai
Yoshifumi et al. and published by Ohm Co.
(1986), ISBN: 4-274-02115-7,
and English translation thereof
- Encl. A Experimental report submitted by the patent
proprietor during the opposition proceedings
on 25 October 2013
- Ref. 3 Experimental report by Dr Ren

V. Independent claim 1 of the main request relates to an
oxide magnetic material and reads as follows:

*"An oxide magnetic material comprising a primary phase
of ferrite with a hexagonal structure and having a
composition containing A, R, Fe, and M wherein
A is at least one element selected from the group
consisting of strontium, barium, calcium and lead, with*

strontium being essentially contained in A, wherein the proportion of Sr in A is at least 70 at%,
R is at least one element selected from the group consisting of bismuth and rare earth elements inclusive of yttrium, with lanthanum being essentially contained in R, and
M is cobalt,
which is represented by formula (I):



wherein $0.1 \leq x \leq 0.4$, $0.1 \leq y \leq 0.4$, $0.8 \leq x/y \leq 5$, and $0.8 \leq z \leq 1.1$."

- VI. Claim 1 of auxiliary request 1 differs from claim 1 of the main request in that the definition of "R" has been amended to read:
"R is at least one element selected from the group consisting of bismuth and rare earth elements inclusive of yttrium, with lanthanum being essentially contained in R, wherein the proportion of La in R is at least 70 at%, and " [emphasis added].
- VII. Claim 1 of auxiliary request 2 differs from claim 1 of the main request in that the definition of "A" has been amended to read:
"A is strontium".
- VIII. Claim 1 of auxiliary request 3 differs from claim 1 of the main request in that the definitions of both "A" and "R" have been amended as outlined for auxiliary requests 1 and 2 above.
- IX. Claim 1 of auxiliary request 4 differs from claim 1 of the main request in that the definitions of "A" and "R" have been amended to read as follows:

"A is strontium".

"R is La".

- X. Claim 1 of auxiliary request 5 relates to a sintered magnet and reads as follows:

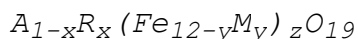
"A sintered magnet comprising an oxide magnetic material comprising a primary phase of ferrite with a hexagonal structure and having a composition containing A, R, Fe, and M wherein

A is at least one element selected from the group consisting of strontium, barium, calcium and lead, with strontium being essentially contained in A, wherein the proportion of Sr in A is at least 70 at%,

R is at least one element selected from the group consisting of bismuth and rare earth elements inclusive of yttrium, with lanthanum being essentially contained in R, and

M is cobalt,

which is represented by formula (I):



wherein $0.1 \leq x \leq 0.4$, $0.1 \leq y \leq 0.4$, $0.8 \leq x/y \leq 5$, and $0.8 \leq z \leq 1.1$,

wherein the sintered magnet has a HcJ of at least 4 kOe and satisfies the formula (IV) at 25 °C,

or has a HcJ of less than 4 kOe and satisfies formula (V) at 25 °C:

$$(IV) Br + 1/3 HcJ \geq 5.75$$

$$(V) Br + 1/10 HcJ \geq 4.82."$$

- XI. Claim 1 of auxiliary request 6 differs from claim 1 of auxiliary request 5 in that the definition of "R" has been amended as in auxiliary request 1.

- XII. Claim 1 of auxiliary request 7 differs from claim 1 of auxiliary request 5 in that the definition of "A" has been amended as in auxiliary request 2.
- XIII. Claim 1 of auxiliary request 8 differs from claim 1 of auxiliary request 5 in that the definitions of both "A" and "R" have been amended as in auxiliary request 3.
- XIV. Claim 1 of auxiliary request 9 differs from claim 1 of auxiliary request 5 in that the definitions of both "A" and "R" have been amended as in auxiliary request 4.
- XV. The appellants' arguments, as far as relevant to the present decision, may be summarised as follows.

The late-filed documents (including D13a and D15-D18) were *prima facie* relevant. The opposition division had exercised its discretion in an unreasonable manner when not admitting these documents. The late-filed documents were proof of the common general knowledge and would have been decisive for the outcome of the opposition proceedings, especially when regarding the second auxiliary request filed during the oral proceedings before the opposition division. Furthermore, these documents would disprove the patentee's argument regarding D6. This discretionary decision should therefore be reversed and the documents should be admitted into the appeal proceedings.

The subject-matter of claim 1 of the main request lacks inventive step in view of D3 as the closest prior art, considering the common general knowledge that replacing barium with strontium leads to increased coercivity, as evidenced by, *inter alia*, D6, D13a and D15-D18.

Auxiliary requests 2-9 should not be admitted into the proceedings because they should have been filed before the opposition division.

The same objection of lack of inventive step of the main request also applies to auxiliary requests 1-4.

The formulation of claim 1 according to each of auxiliary requests 5-9 merely amounts to claiming the technical problem underlying the invention, not clearly defining the essential features thereof, in violation of Article 84 EPC.

XVI. The respondent's arguments, as far as relevant to the present decision, may be summarised as follows.

The opposition division's decision not to admit the late-filed documents was fully justified and should therefore be maintained. Following T 875/06, late-filed documents are only to be admitted into the proceedings if they are more relevant than the documents already on file, which is not the case here.

The subject-matter of claim 1 of the main request involves an inventive step. Considering D3, the objective technical problem is the provision of improved oxide magnetic materials exhibiting improved coercivity without sacrificing remanence. The skilled person faced with this technical problem would have had no reason to select specifically those materials within the disclosure of D3 that contain La/Co, and not Pr/Co, La/Ni or Pr/Ni. There is no teaching in the prior art that the selection of lanthanum and cobalt and, as a further selection, the replacement of barium by strontium would have led to the desired improved properties. Nor is there any guidance to replace barium

by at least 70 at%, which constitutes a third selection. Starting from D3, the skilled person would therefore not have had any motivation to make the three necessary selections in order to arrive at the subject-matter of claim 1.

Moreover, the skilled person would not have combined the teaching of D6 with D3, because D6 teaches away from replacing more than 50 at% barium by strontium.

The skilled person would not have combined the teaching of any of D13a and D15-D18 with D3 because these documents relate to different, simpler materials.

Auxiliary requests 1-4 contain further limitations regarding components "A" and "R", in comparison to the main request.

Auxiliary requests 5-9 relate to a sintered magnet comprising an oxide magnetic material. The definition in claim 1 of each of these requests recites formulas (IV) and (V). This definition relies on the usual properties of magnets. The invention cannot otherwise be defined more precisely without unduly restricting the scope of the claims. The skilled person can easily verify whether a sintered magnet fulfils one of these formulas. The claims of auxiliary requests 5-9 are therefore clear.

XVII. Appellant 1 (opponent 1) requested that the decision under appeal be set aside and that the patent be revoked. Appellant 2 (opponent 2) had made the same request in writing.

The respondent (patent proprietor) requested that the appeals be dismissed (main request), or, alternatively,

that the patent be maintained in amended form on the basis of the set of claims of one of auxiliary requests 1 to 9 filed on 4 October 2016.

Reasons for the Decision

1. Admission of documents D13a, D15-D18 and Reference 3 into the appeal proceedings
 - 1.1 In their statements of grounds of appeal, the appellants used, *inter alia*, documents D13a and D15-D18 to prove the common general knowledge they relied upon when arguing lack of inventive step. They also cited "Reference 3", an experimental report.
 - 1.2 These and further documents had been filed by the appellants during the opposition proceedings, with letters dated 5 November 2015 and 6 November 2015, after expiry of the opposition period. The opposition division exercising its discretion under Article 114(2) EPC did not admit them because they were found to be late filed, not more relevant than the documents on file, and (partly) without certified translations (point 3 of the decision).
 - 1.3 The appellants argued that the opposition division had exercised its discretion incorrectly or erred by not admitting these documents.
 - 1.4 According to settled case law, the opposition division must first examine newly filed documents as to their relevance. Late-filed facts and evidence and supporting arguments should only exceptionally be admitted into the proceedings if, *prima facie*, there are reasons to

suspect that such late-filed documents prejudice the maintenance of the European patent in suit (see Case Law of the Boards of Appeal of the EPO, 9th edition 2019, IV.C.4.5.1).

The opposition division did not provide a detailed reasoning in support of its conclusion that the documents did not bring any additional information. According to the minutes of the oral proceedings, the admissibility of these documents was discussed in the context of inventive step of the then main request. The conclusion drawn by the opposition division is understandable when following the explanations given by the appellants in the accompanying submissions during the opposition proceedings and when accepting the doubts raised as to the translations provided. Although there exists no general requirement that translations necessarily need to be certified, the opposition division's position to also take the (lack of) availability of an undisputable translation into account cannot be considered unreasonable in the case at issue.

Hence, the circumstances of the present case support the opposition division's conclusion that the late-filed documents did not bring any new information, but were similar to documents already on file. This implies that these documents were not expected to change the conclusion reached based on the other documents already on file, and so were not considered *prima facie* relevant.

- 1.5 It is established jurisprudence that a board of appeal should only overrule the way in which the opposition division exercised its discretion if the board concludes that the opposition division did so according

to the wrong principles, or without taking into account the right principles, or in an unreasonable way (see Case Law of the Boards of Appeal of the EPO, 9th edition 2019, IV.C.4.5.2). For the reasons indicated above, the board is satisfied that the opposition division did not apply the wrong principles or exercise its discretion in an unreasonable way.

1.6 However, in the present case, the board exercising its discretion nevertheless decided to admit documents D13a, D15-D18 and Reference 3 into the appeal proceedings pursuant to Article 12(4) RPBA, for the reasons set out below.

1.7 The board shares the view expressed in T 971/11 that a document which would have been admitted into appeal proceedings if it had been filed for the first time at the outset of those proceedings should not, however, be held inadmissible for the sole reason that it was already filed before the department of first instance (and not admitted) (points 1.2 and 1.3 of the Reasons); see also T 47/14 (points 2.4, 2.5 and 2.10 of the Reasons).

1.8 The board finds that citing D13a and D15-D18 is a reaction to the opposition division's decision according to which neither D6 nor D4 rendered a Sr content of at least 70 at% in terms of component A obvious.

In particular, the filing of certified translations of these documents likewise constitutes a reaction to remedy the opposition division's corresponding objection.

- 1.9 Taking these certified translations into account, D13a and D16-D18, which are excerpts from textbooks, are as such more suitable to establish common general knowledge than the previously filed patent documents. In particular, they are more suitable than an individual statement like in the "background art" section of D6.
- 1.10 In view of auxiliary requests 5-9, Reference 3 (experimental report by Dr Ren) also became relevant; it includes an experimental report and is relevant for the question of which technical effect is achieved. It was additionally cited in view of the question whether the relationship expressed in formulas (IV) and (V) was fulfilled across the entire scope of the claim.
- 1.11 For the board, the cited documents are also *prima facie* (more) relevant for the outcome of the proceedings than the documents on which the decision under appeal is based (see the reasoning below). Therefore, their admission is not in contrast to decision T 875/06, cited by the respondent, either. In T 875/06, further evidence was admitted because it did not result in a change in the complainant's evidence; it only further supported the arguments already presented and was more relevant than the documents already on file (point 8 of the Reasons).

Main Request

2. Inventive step
- 2.1 The patent in suit concerns a magnet powder or a sintered magnet comprising ferrite (see paragraph [0001]).

- 2.2 It is common ground that D3 is a suitable starting point for the problem/solution approach. The board shares this view.

Document D3 relates to ferrimagnets with magnetoplumbite structure (see the title) and examines saturation magnetisation and also coercive force (see the first sentence of the document, the figures and page 1406, second and third full paragraphs). D3 therefore concerns a similar purpose as the patent in suit.

- 2.3 The magnetoplumbite structure is a hexagonal structure (paragraph [0002] of the patent in suit).

The most relevant disclosure in D3 is the specific compositions $(1-x) \text{BaFe}_{12}\text{O}_{19} - x \text{La}^{3+}\text{Fe}^{3+}_{11}\text{Co}^{2+}\text{O}_{19}$, various specific values of x in the range 0-1 being depicted in Figure 1, including values from $x=0.1$ to 0.4.

There was agreement that " x " had the same meaning in D3 as in the patent in suit. The specific compositions disclosed in D3 consequently concern the case $x=y$, $z=1$ and $x/y=1$.

- 2.4 The respondent contested the consideration of these specific compositions as the starting point for assessing inventive step. In its opinion, a non-obvious selection within the disclosure of D3 was additionally required to arrive at this starting point, considering that D3 also disclosed alternative compositions containing Pr and Co, La and Ni, and Pr and Ni (Figures 1, 2).

- 2.5 In the present case, the relevant La and Co containing compositions are, however, specifically disclosed in D3, along with their saturation magnetisation (see Figure 1) and the observation that they exhibit increased coercive force in comparison to unsubstituted barium ferrite (page 1406). Assessing inventive step may therefore be based on this specific disclosure of D3.
- 2.6 The subject-matter of claim 1 merely differs from this disclosure of D3 in that barium is replaced by strontium by at least 70 at%.
- 2.7 The respondent argued with reference to paragraph [0018] of the patent in suit that the objective technical problem was the provision of a ferrite magnet with improved coercivity (HcJ) without sacrificing remanence (Br).
- 2.8 The board is satisfied that this technical problem has been solved, having regard to the available experimental data ("Enclosure A" provided by the respondent, "Reference 3" submitted by the appellants, and Example 4 in conjunction with Table 3 and Figure 13 of the patent in suit).
- 2.9 The solution is the oxide magnetic material of claim 1, comprising at least 70 at% Sr as component "A".
- 2.10 The appellants argued that it was common general knowledge that strontium ferrites exhibited higher coercivity than barium ferrites, and that the skilled person, faced with the problem of improving coercivity, would therefore have attempted to replace barium with strontium.

- 2.11 The body of evidence available, namely the background art section of D6 and documents D13a and D16-D18, shows that this common general knowledge existed, as set out in the following.
- 2.11.1 Irrespective of the preference for barium in D6 for being less expensive than strontium (col. 1, lines 23-25), D6 states that hexagonal barium ferrite magnets are less likely to offer high coercivity because of their about 10% lower magnetic anisotropy than strontium ferrite (col. 1, lines 26-29).
- 2.11.2 According to D13a (English translation of page 264; Figure 8-3-1), the magnetic properties of strontium ferrite are better than those of barium ferrite. It is stated that "[w]hen Br is equal, intrinsic coercivity (jH_c) of SrM is approximately 30% higher than that of BaM and SrM is 4% lighter than BaM, as shown in Fig. 8-3-1". The board does not see any contradiction within this statement. The intended use as a permanent magnet, mentioned in D13a, also indicates that the materials have good remanence (Br).
- 2.11.3 D16 (English translation of paragraphs 1.2.1 and 1.4.2, Figure 3) teaches that strontium can replace barium completely in barium ferrite, and that the coercivity (iH_c) of strontium ferrite is 8.1 kOe and thus higher than that of barium ferrite, which is 6.9 kOe.
- 2.11.4 D17 (English translation of page 129, lines 4-20; Table 5.1) also shows that strontium ferrite exhibits a higher anisotropy field (H_a), related to the coercive force, than barium ferrite.
- 2.11.5 The improved magnetic properties of strontium ferrite in comparison to barium ferrite, and in particular the

higher anisotropy field, are also known from D18 (English translation, see the description of Figure 3.4).

- 2.12 The respondent doubted that any teaching of these documents could be transferred to D3, because D3 related to more complex materials additionally containing lanthanum and cobalt.
- 2.13 It is acknowledged that the indicated parts of D6, D13a and D16-D18 relate to simpler materials than those disclosed in D3 because they do not contain any lanthanum or cobalt. However, strontium and barium have almost the same ion radius (D16, English translation of paragraph 1.2.1), and their ferrites have similar lattice parameters (D16, Table 1). Hence, the skilled person would have also expected the interchangeability of barium with strontium in the case of the materials known from D3, which are solid solutions of barium ferrite (Figure 1 of D3, footnote).
- 2.14 As indicated, the skilled person would have been aware that strontium ferrite exhibits higher coercivity than barium ferrite (point 2.11), and that this is reflected in experimental data (see D13a). This knowledge in conjunction with the generally known usefulness of strontium and barium ferrites as permanent magnets and the explicit disclosure in D13a that coercivity is improved at a given remanence value would have led the skilled person, faced with the technical problem of improving coercivity without sacrificing remanence, to attempt replacing barium with strontium in the materials known from D3 and replace it entirely. The skilled person would therefore have arrived in an obvious manner at the solution proposed in claim 1.

- 2.15 The subject-matter of claim 1 of the main request consequently lacks inventive step (Article 56 EPC).

Auxiliary requests 1 to 9

3. Admission into the appeal proceedings

- 3.1 The objection (see point XV.) concerned auxiliary requests 2-9. These auxiliary requests were filed with the respondent's reply to the statements of grounds of appeal and thus at the first possible moment during the current appeal proceedings. They constitute a further limitation of the request allowed by the opposition division and relate to the same invention defended before the opposition division, albeit now defined in different terms. Hence, the board admitted these auxiliary requests into the proceedings (Article 12(2) RPBA).

4. Auxiliary requests 1-4

- 4.1 The subject-matter of claim 1 of each of auxiliary requests 1-4 differs from claim 1 of the main request due to the narrower definition of the proportion of strontium in "A" and/or the proportion of lanthanum in "R".

However, the narrower definition of the content of lanthanum (auxiliary requests 1, 3 and 4) does not result in any further distinction over D3, the proportion of lanthanum in the relevant materials known from D3 being 100 at% when expressed in relation to "R", i.e. "R" being La, using the denotation of the patent in suit.

As indicated with respect to the main request, the skilled person would have been motivated to replace barium entirely by strontium and would thus have arrived at using strontium as component "A". The indication that "A is strontium" (auxiliary requests 2, 3 and 4) therefore does not change the assessment of inventive step.

4.2 The subject-matter of claim 1 of each of auxiliary requests 1-4 consequently lacks inventive step (Article 56 EPC).

5. Auxiliary requests 5-9

5.1 Claim 1 of each of these auxiliary requests relates to a sintered magnet (as in claim 4 of the main request), further defined in that the HcJ and Br fulfil either of formulas (IV) and (V).

5.2 Article 84 EPC

5.2.1 The definition of the sintered magnet by reference to formulas (IV) and (V) was not present in the claims of the granted patent. It therefore constitutes an amendment which may be examined for compliance with the requirements of Article 84 EPC, following G 3/14 (Order).

5.2.2 According to the respondent, these formulas merely relate to the usual properties of magnets, namely the remanence (Br) and the coercivity (HcJ), and therefore provide a clear definition of the claimed magnet.

5.2.3 The board does not agree. While the remanence (B_r) and the coercivity (H_cJ) as such may be usual properties, the definition of the claimed sintered magnet in terms of a relation between these properties as expressed in the indicated formulas is unusual.

5.2.4 Moreover, the reference to formulas (IV) and (V) may be regarded as a definition in terms of the result to be achieved, which in the present case amounts to a statement of the technical problem which the patent in suit attempts to solve, in that this definition is intended to reflect improved magnetic properties.

Under these circumstances, it is not sufficient that the intended result can be positively verified by the skilled person, if the essential features necessary for achieving said results are not known.

In the present case, however, even the narrowest definition of the sintered magnet, namely the definition in claim 1 of auxiliary request 9 according to which "A" is strontium and "R" is lanthanum, does not contain all the essential features for achieving this result.

As may be seen in the table provided on page 7 of the statement of grounds of appeal of appellant 2, which is based on Example 8 and Figure 18 of the patent in suit, even a hexagonal ferrite according to formula (I), with "A" being strontium, "R" being lanthanum and "M" being cobalt, does not necessarily satisfy either formula (IV) or formula (V), depending on the ratio of x/y and the calcining/sintering temperatures. In the context of this Example 8, the patent in suit explicitly acknowledges that the degradation of magnetic properties becomes noticeable in the range $x/y > 2$

(paragraph [0110]), this range being encompassed by claim 1.

Furthermore, the experimental report in Reference 3 also shows a material according to formula (I) which satisfied neither formula (IV) nor (V), see Sample "AA1".

Hence, even the narrowest version of claim 1, namely claim 1 of auxiliary request 9, does not define all the essential features for achieving the desired result. Nor is there any evidence that it would have been common general knowledge to steer the magnetic properties of the claimed materials towards those defined with reference to formulas (IV) and (V).

The observation put forward by the respondent that the invention cannot otherwise be defined more precisely without unduly restricting the scope of the claims does not remedy the indicated deficiencies.

In the present case, the definition of the claimed sintered magnet by reference to formulas (IV) and (V), reflecting the desired, improved magnetic properties, leaves the skilled person in doubt as to the necessary structural features. It consequently lacks clarity.

- 5.3 The same conclusion is reached in respect of the broader definition of the sintered magnets in claim 1 of each of the higher ranking auxiliary requests 5-8, which fully encompasses the subject-matter of claim 1 of auxiliary request 9 and merely differs in the definition of components "A" and "R" (see points X. to XIII.).

5.4 Auxiliary requests 5-9 therefore do not meet the requirements of Article 84 EPC.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The patent is revoked.

The Registrar:

The Chairman:



C. Vodz

E. Bendl

Decision electronically authenticated