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**Datasheet for the decision  
of 22 April 2008**

**Case Number:** T 1319/04 - 3.3.02

**Application Number:** 94306847.8

**Publication Number:** 0643965

**IPC:** A61K 31/445

**Language of the proceedings:** EN

**Title of invention:**

Nicotinic acid compositions for treating hyperlipidemia

**Applicant:**

Kos Life Sciences, Inc.

**Opponent:**

-

**Headword:**

Dosage regimen/KOS LIFE SCIENCES, INC.

**Relevant legal provisions:**

EPC Art. 53(c) and 54(5)

**Relevant legal provisions (EPC 1973):**

EPC Art. 52(4) and 54(5)

**Keyword:**

"Allowability of dosage regimen - under Articles 52(4) and 54(5) EPC 1973 and under Articles 53(c) and 54(5) EPC 2000 - referral to Enlarged Board"

**Decisions cited:**

G 0005/83, T 0019/86, T 0290/86, T 0570/92, T 0051/93,  
T 0317/95, T 0056/97, T 0584/97, T 0004/98, T 0485/99,  
T 1020/03

**Headnote:**

The following questions are referred to the Enlarged Board of Appeal for decision:

1. Where it is already known to use a particular medicament to treat a particular illness, can this known medicament be patented under the provisions of Articles 53(c) and 54(5) EPC 2000 for use in a different, new and inventive treatment by therapy of the same illness?
2. If the answer to question 1 is yes, is such patenting also possible where the only novel feature of the treatment is a new and inventive dosage regime?
3. Are any special considerations applicable when interpreting and applying Articles 53(c) and 54(5) EPC 2000.



Case Number: T 1319/04 - 3.3.02

**D E C I S I O N**  
of the Technical Board of Appeal 3.3.02  
of 22 April 2008

**Appellant:** Kos Life Sciences, Inc.  
2100 N. commerce Drive  
Weston, FL 33326 (US)

**Representative:** Wallace, Sheila Jane  
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**Decision under appeal:** Decision of the Examining Division of the  
European Patent Office posted 16 June 2004  
refusing European application No. 94306847.8  
pursuant to Article 97(1) EPC.

**Composition of the Board:**

**Chairman:** U. Oswald  
**Members:** J. Riolo  
S. Perryman  
A. Lindner  
P. Mühlens

## Summary of Facts and Submissions

I. European patent application No. 94 306 847.8 published as No. EP 643 965 was refused by a decision of the Examining Division of 25 September 2003 on the grounds of lack of novelty under Article 54(1) and (2) EPC 1973 and because it did not meet the requirements of Article 52(4) 1973 EPC.

II. The decision was based on the set of 7 claims filed on 25 September 2003 during the oral proceedings before the Examining Division. Independent claim 1 reads as follows:

1. The use of nicotinic acid or a compound metabolized to nicotinic acid by the body selected from a group consisting of d-glucitol hexanicotinate, aluminium nicotinate, niceritrol, d,1-alpha-tocopheryl nicotinate and nicotinyl alcohol tartrate, for the manufacture of a sustained release medicament for use in the treatment by oral administration once per day prior to sleep, of hyperlipidaemia characterised in that the medicament does not comprise in admixture, 5-30% hydroxypropyl methylcellulose, 2-15% of a water soluble pharmaceutical binder, 2-20% of a hydrophobic component and 30-90% nicotinic acid.

III. The following documents were cited *inter alia* during the proceedings before the Examining Division in the reason for the decision and during the written proceedings before the Board of Appeal:

(1) EP-A-577504

(2) US-A-5126145

- (3) JP-A-6331 0827 (cited as WPI abstract; English translation filed by the applicant)
- (4) JP-A-5221 854 (cited as WPI abstract)
- (5) J.Clin.Invest., vol. 52(3), 1973, 732-740
- (6) EP-A-349235
- (11) The American Journal of Medicine, 93 1992, 102-104
- (12) The Journal of Family Practice, 34, 1992, 313-319
- (13) Southern Medical Journal, 84, 1991, 496-497
- (14) Metabolism, 34, 1985, 642-650
- (15) J. Cardiovasc. Pharmacol. Therapeut., 1, 1996, 195-202
- (16) Arch. Biochem. Biophys., 54, 1955, 558-559
- (17) JAMA, 261(24), 23/30 June 1989, 3582-3587
- (18) Am. J. Med., 91, September 1991, 239-246
- (19) JAMA, vol. 271(9), 2 March 1994, 672-677
- (20) American Journal of Medicine, vol. 92, January 1 992, 77-81
- (21) Presentation by Dr Eugenio Cefali filed with the appellant's grounds of appeal

Document (15) does not belong to the prior art, and was cited only for references to prior art.

Document (19) was post-published, and is not taken into account in this decision.

Document (21) does not belong to the prior art. It contains experimental data which are relevant for the assessment of inventive step.

IV. As set out in the decision under appeal, the Examining Division was of the opinion that the subject-matter of independent claim 1 and of its dependent claims 2 to 7 was anticipated by the disclosure in documents (2) to

(4), which contemplated the use of nicotinic acid for the manufacture of a sustained release medicament for use in the treatment of hyperlipidaemia by oral administration (point 33).

In that respect, the Examining Division, referring in particular to decision T 317/95 and T 584/97, argued that the feature of claim 1 relating to a specific drug regimen, i.e. once per day prior to sleep, reflected a medical activity excluded from patentability under Article 52(4) EPC 1973, which could not therefore be considered to represent a further medical indication from which novelty can be derived (points 27 and 28).

As to the disclaimer in claim 1 vis-à-vis the interfering European patent application (1), which disclosed a medicament comprising, in admixture, 5-30% hydroxypropyl methylcellulose, 2-15% of a water soluble pharmaceutical binder, 2-20% of a hydrophobic component and 30-90% nicotinic acid for the manufacture of a sustained-release medicament for use in the treatment of hyperlipidaemia by oral administration after the evening meal and before bedtime, the Examining Division found that it was in line with the decisions of the Enlarged Board of Appeal G 1/03 and G 2/03 (point 15).

V. The appellant (applicant) lodged an appeal against this decision.

It filed a main and an auxiliary request with its grounds of appeal.

The set of claims of the main request is identical to the set of claims before the Examining Division with the deletion of dependent claims 6 and 7.

VI. The appellant argued in writing that the disclosure in documents (2) to (4) were not novelty-destroying because none of these documents disclosed the specific regimen of claim 1, namely "once per day prior to sleep".

It further held that this feature not only imparted novelty but it was also not excluded by Article 52(4) EPC 1973.

In that respect, it referred in particular to decision T 1020/03 stating that the wording of Article 52(4)EPC 1973 and the Enlarged Board of Appeal decision G 5/83 required broad allowability of claims in second medical use format, which did not require any restriction of the area where novelty can be looked for.

As to inventive step, it submitted that the reduction or elimination of well-known side effects was the result of the timing of niacin administration, once a day prior to sleep.

Having regard to the available prior art, which did not suggest that timing had any effects at all, the appellant considered that the claimed subject-matter was not obvious.

All the more so because the only solution put forward in terms of regimen variation to avoid severe side effects was to reduce the dosage or stop taking niacin altogether.

VII. In its letter dated 9 November 2004, the appellant requested accelerated appeal proceedings.

VIII. The appellant requested in writing:

1. Reversal of the decision and grant of the application with the main request claims.

2. As an alternative to this request, grant of the application with the auxiliary request claims.

3. If the Board were minded not to grant the request under 1 or 2, referral of the following questions to the Enlarged Board:

1. Can the absence of side effects be considered a technical contribution to the art, or alternatively a technical effect such that it can render the known treatment of a specified pathological condition novel?

2. Are all drug dosage regimens excluded from patentability by Article 52(4) EPC 1973?

Oral proceedings were only requested if the Board contemplated a decision adverse to the appellant.

### **Reasons for the Decision**

1. The appeal is admissible.



2. *Substantive examination of the application*

*Main request*

2.1 Article 84 EPC and Article 123(2) EPC

The Examining Division found that no objection arose with regard to the claims of this request as to clarity and added matter and the Board sees, *prima facie*, no reason to differ.

In particular, the feature in claim 1 - "once per day prior to sleep" - implies for the skilled person that the patient undergoing a therapy has to take the medicament when going to bed to sleep.

This sensible reading of this feature is not contradicted by the general definition given in the description of the application which indicates that for the therapy the composition containing nicotinic acid is administered "prior to each periodic physiological loss of consciousness" (A1 publication, page 3, lines 18 and 19).

2.2 Article 54 EPC

2.2.1 As to the novelty objection vis-à-vis documents (2) to (4) raised by the Examining Division, the Board agrees that documents (2) and (3) disclose the use of nicotinic acid and niceritrol respectively for the manufacture of a sustained release medicament for use in the treatment by oral administration of hyperlipidaemia ((2), column 5, lines 54 to 60; WPI abstracts of (3)).

In fact, as the treatment of hyperlipidemiae is the only known therapeutic treatment using nicotinic acid, the Examining Division was right to conclude that this treatment was implicitly disclosed for the skilled person in documents (2) and (3) although it was not expressis verbis mentioned in document (2) or in the abstract (3).

These documents do not however disclose the specific regimen of claim 1, namely "once per day prior to sleep".

Indeed, document (2) discloses tables including doses of 250, 500 and 750 mg and indicates that niacin is to be given twice daily (column 5, lines 58 to 60).

The English translation of document (3) is silent about any regimen. It only discloses that niceritrol, a biological precursor of nicotinic acid, is administered after mealtime, without further indication (page 8, test example 3).

In that respect, the Board notes also that the purpose of test example 3 is primarily directed to assessment of the frequency of occurrence of flushes as side effects rather than to therapy.

Document (4) is the Japanese equivalent of document (2) so that, having regard to the WPI abstract, the same comment applies, namely that the specific regimen of claim 1 "once per day prior to sleep" is not disclosed.

2.2.2 As can be seen from the following, none of the remaining available documents discloses this particular regimen either:

Document (5) concerns intravenous infusion of nicotinic acid.

Document (6) discloses a sustained-release medicament for oral administration containing nicotinic acid which must be taken by the patient **three times daily** (page 4, line 24).

Document (11) relates to a study concerning hepatotoxicity associated with a sustained-release medicament containing nicotinic acid in the treatment of hyperlipidemiae. It contains no mention of a regimen.

Document (12) concerns a clinical trial on a sustained-release medicament containing nicotinic acid taken **two or three times daily** (page 317, left column, first paragraph).

Document (13) is a report on side effects which can result from therapy with a sustained-release preparation containing nicotinic acid. It mentions a **three-times per day** regimen (page 496, lines 1 to 3, under "Case report").

Document (14) concerns a clinical trial on a sustained-release medicament containing nicotinic acid. The patients were given the medicament **three times a day** (page 643, second paragraph, first sentence).

Document (16) does not deal with the sustained-release formulation of nicotinic acid and the prescribed regimen is **four times a day** (page 558, third paragraph, lines 21 and 22)

Document (17) describes taking the sustained-release medicament containing nicotinic acid **three times daily** (page 3585, third column, lines 13 and 14).

Document (18) deals both with a sustained-release medicament containing nicotinic acid and an instant-release medicament containing nicotinic acid. It discloses that in the case of the instant-release formulation the regimen starts with a low dose at breakfast and is gradually increased to a higher dosage in four divided doses (page 240, right column, lines 2 to 5). It is however silent as to the regimen in the case of the sustained release medicament.

Document (20) deals also with a sustained-release medicament containing nicotinic acid and an instant-release medicament containing nicotinic acid. It refers to the U.S. Pharmacopeia Drug Information for Health Care Professionals which states that the regimen for a sustained-release formulation is **two times per day**, morning and evening (page 81, left column, second paragraph).

This document discloses, moreover, without indicating the type of formulation of the medicament, that the therapy is generally begun with single doses of subtherapeutic dosage and that the frequency of dose and total daily dose are gradually increased up to a

first-level therapeutic dose (page 77, right column, second paragraph, first two sentences).

2.2.3 As is apparent from the above, the feature in claim 1 - "once per day prior to sleep" - is not anticipated by the available prior art documents.

2.3 As this application was pending on 13 December 2007, the date on which the EPC 2000 entered into force, and no decision on the grant of the patent had yet taken effect, then by virtue of the Decision of the Administrative Council of 28 June 2001 on the transitional provisions under Article 7 of the Act revising the European Patent Convention of 29 November 2000, Articles 1 and 3, the present application now falls to be considered under the provisions of Articles 53(c) and 54(4) and (5) EPC 2000, and no longer under Articles 52(4) and 54(5) EPC 1973 which governed the position when the examination division reached its decision.

2.3.1 Articles 53 and 54 EPC 2000 read, insofar as relevant:  
Article 53 - Exceptions to patentability European patents shall not be granted in respect of:

(a) ...

(b) ...

(c) methods for treatment of the human or animal body by surgery or therapy and diagnostic methods practised on the human or animal body; this provision shall not apply to products, in particular substances or compositions, for use in any of these methods.

Article 54 - Novelty

.....

54(5) Paragraphs 2 and 3 shall also not exclude the patentability of any substance or composition referred to in paragraph 4 for any specific use in a method referred to in Article 53(c), provided that such use is not comprised in the state of the art.

2.3.2 The answer to the question whether the feature in claim 1 - "once per day prior to Sleep" can be recognized or not under Article 54(5) EPC 2000 as a specific use in a method referred to in Article 53(c), which use is not comprised in the state of the art, is likely to be decisive for the outcome of this case, as if the answer is yes, then for reasons given below inventive step and susceptibility of industrial application (Articles 56 and 57 EPC 2000) could also be recognized.

2.4 Article 56 EPC

2.4.1 The application concerns the treatment of hyperlipidaemia with a sustained-release medicament for oral administration containing nicotinic acid characterised in that it is taken "once per day prior to sleep" (A1 publication, claim 1, page 2, first paragraph, page 3, lines 15 to 19).

2.4.2 According to the description, sustained-release formulations containing nicotinic acid were successfully developed to avoid the flush side effect associated with the previous formulation of nicotinic acid, namely the immediate release formulation (A1 publication, page 2, lines 23 to 29).

This is well supported by documents (2), (3), (6), (11), (14), (18) and (20).

Document (3) recites that the side effects such as flushes are substantially suppressed by the sustained release formulation of nicotinic acid (English translation of (3), page 8, paragraph entitled "Effect of Invention").

Document (6) indicates that the flushing effect is avoided owing to the sustained-release formulation containing guar gum (page 6, last paragraph; see also document (11), second and third sentences of the summary).

Document (14) states that cutaneous flushing is minimized with the sustained release formulation of nicotinic acid (first sentence of summary).

Document (18) advocates the replacement of the instant-release formulation by the sustained-release formulation in the case of cutaneous flushing (page 240, left column, first sentence of the last paragraph).

Document (20) mentions that sustained-release formulation preparations were developed to minimize or eliminate a flushing reaction (page 78, last sentence of the first paragraph).

- 2.4.3 The description of the present application indicates further that the sustained-release formulations have, however, worse side effects than immediate-release

formulations, such as liver toxicity (A1 publication, page 2, lines 30 to 40).

The hepatotoxicity of all the sustained-release formulations of nicotinic acid is well supported by documents (11), (12), (20) and (21).

Document (11) reports that there is growing evidence that the sustained release-formulations may be associated with much greater hepatotoxicity (page 103, right column, last sentence).

Document (12), a clinical trial using sustained-release formulations of nicotinic acid mentions elevated liver enzyme levels, which is an indication of liver toxicity (page 317, left column, second sentence, under "Discussion", page 318, right column, last sentence of the first paragraph under "Discussion").

Document (20) states that liver toxicity is a potentially serious effect of nicotinic acid (page 78, left column, penultimate paragraph; document).

Document (21) shows on slide 7 that the administration of a sustained-release formulation of nicotinic acid twice daily, compared to an immediate-release formulation, increases the amount of transaminases, this liver enzyme elevation being an indication of hepatotoxicity, which is an indication of liver toxicity (slide 7, and page 3, text under "Slide 7").

- 2.4.4 Having regard to the working examples of the description of the application, it appears that, when the sustained-release formulation is taken once a day



at night in an amount of 1 500 mg, there is no elevation in the liver enzymes, which indicates that the liver is not damaged (tables III, IV and V).

This is confirmed by the experimental data in document (21) which shows that even at a dosage of 3 g a day, the liver enzyme level remains unchanged, as for an immediate release formulation, when the sustained-release medicament is taken "once a day prior to sleep", whereas, in the case of a twice-daily regimen, there is a substantial dose-related increase of the liver enzymes.

- 2.4.5 Document (2), for instance, which discloses the use of nicotinic acid for the manufacture of a sustained-release medicament for use in the treatment of hyperlipidaemia by oral administration given twice daily, could be regarded as the closest state of the art.
- 2.4.6 Having regard to points 2.4.1 to 2.4.5 above, the problem to be solved as against document (1) can be seen as the provision of an oral treatment of hyperlipidaemia with a sustained-release medicament which avoids a hepatotoxicity side effect.
- 2.4.7 This problem is solved by the particular feature in the subject-matter of claim 1 relating to the particular regimen, ie once per day prior to sleep.
- 2.4.8 In the light of working examples, the description of the application and the experimental data of document (21), the Board is satisfied that the problem has been plausibly solved (see points 2.4.4 above).

2.4.9 Thus, the question to be answered is whether the proposed solution, namely the administration of the sustained-release medicament containing nicotinic acid once per day prior to sleep, was obvious to the skilled person in the light of the prior art.

2.4.10 In that respect, the Board observes that only documents (11) and (12) are concerned with hepatotoxicity of sustained-release medicaments containing nicotinic acid.

Document (11) is however silent as to any suggestion that the physician should specify the regimen of administration of the sustained-release medicament to alleviate side effects. It merely indicates that the physician's role will be to decide whether niacin can be used at all (page 103, left column, penultimate sentence).

Document (12) advocates either reducing the dose or discontinuing the treatment (page 317, left column, second sentence under "Discussion").

This document also teaches that the side-effect profile changes depending on the regimen, ie three times per day vs. twice daily.

The side effects considered in that respect were however gastrointestinal side effects, which were less frequent with a twice-daily regimen, and cutaneous side effects, which were reduced when the regimen was three times a day (page 317, right column, second paragraph under "Side effects and intolerance").

The remaining documents are even less relevant since they are not concerned with hepatotoxicity and they contains nothing to suggest that an administration regimen could have any effect on side effects.

The Board notes that document (5), published in 1973, is the only document suggesting that it would be advantageous to supply niacin through a nocturnal period because lipolysis appears to be then most active(page 739, right column, last sentence).

This suggestion does not however concern the effect on hepatotoxicity and it relates to intravenous injections.

Under these circumstances, the Board concludes, in the light of the facts as they stand at present on file, that the feature in claim 1, "once per day prior to sleep", involves an inventive step since the skilled person would not have envisaged changing the usual regimen for the treatment of hyperlipidaemia by oral administration from twice daily to once per day prior to sleep.

In fact, having regard to the known hepatotoxicity of nicotinic acid, common sense would rather prompt the skilled person to adopt a regimen with reduced amounts and more frequent intakes rather than a regimen where all the toxic drug is taken at once.

This is confirmed by the disclosure in document (18), which advocates that the regimen starts with a low dose at breakfast and is gradually increased up to a higher dosage in four divided doses (page 240, right column, lines 2 to 5), and (20), which teaches that the therapy

is generally begun with single doses of subtherapeutic dosage and that the frequency of dose and totally daily dose are gradually increased until a first level therapeutic dose (page 77, right column, second paragraph, two first sentence).

In the light of the available documents, the skilled person would also not expect any advantages as to the hepatotoxicity when the drug is taken prior to sleep since the prior art is totally silent in that respect.

## 2.5 Article 57 EPC

As appears from the numerous prior art documents relating to sustained-release oral medicaments containing nicotinic acid (eg (2), (3), (4), (6), (11), (12), (14), (18), (20)), the use of nicotinic acid for the manufacture of a sustained-release medicament for use by oral administration is well-known in the art and various commercial medicaments are available on the market.

There is accordingly no doubt that at least the feature in claim 1 relating to the manufacture of a sustained-release medicament containing nicotinic acid for use by oral administration fulfils the requirements of Article 57 EPC.

3. The conclusion from this assessment is that the decision in the present case does indeed depend on the answer to the question set out in point 2.3.2 above. In more generalized form this raises the legal question of whether a use, which differs from uses already part of the state of the art only in the dosage regimen for the

substance to be administered to treat a particular medical condition, can be considered as a new specific use under Article 54(5) EPC 2000. The language of Article 54(5) EPC is broad and does not of itself suggest that some specific uses should be treated differently from others.

3.1 This board is not aware of any other case yet having been decided under Article 54(5) EPC 2000, and this article has no express equivalent in the EPC 1973. However it appears from the travaux préparatoires for the Conference of the Contracting States to revise the European Patent Convention which took place in Munich, 20 to 29 November 2000, in particular the conference proceedings (document MR/24/00) pages 71 and 72, points 136 to 142, and document MR/18/00, Basic Proposal - Explanatory notes- Article 54(4) and 54(5) EPC, that "as regards the second or further medical uses, the case law evolved by the EPO Enlarged Board of Appeal should be enshrined in the Convention" (point 139 conference proceedings). Thus to understand Article 54(5) EPC 2000, it is appropriate to refer to the case law as embodied in Enlarged Board of Appeal decision G 5/83 issued on 5 December 1984 and the correspondingly worded decisions in other official languages in parallel cases (e.g. G 1/83 and G 6/83).

3.2 Before considering decision G 5/83 itself, it should be set in its historical context. For this it is convenient to refer to a view widely held before these Enlarged Board of Appeal decisions issued, as reflected in a statement to be found in the textbook by Maître Paul Mathély "Le Droit Européen des brevets

d'invention" (Paris, 1978), page 116 (translation by this board):

"...Thus, a known substance or composition which as part of the state of the art is no longer patentable, may nevertheless be patented for a first use as a medicament; but no patent may be granted if one discovers a second possibility of using the same substance.

This provision has the following explanation: by reason of medical confidentiality, it is not possible to control the use of the medicament; as a result if a product is already used as a medicament, it is in practice not possible to grant an exclusion right relating to another medical application of the same substance.

Nevertheless, this applies only to the same substance or composition. It follows that if the active principle is treated, adapted or made up in a different way for a new therapeutic application, it must be considered as a different product, put forward for the first time as a medicament."

Thus Article 54(5) EPC 1973 was here viewed as permitting only patenting of a substance for medical application where the patent was the first to suggest any medical application of that substance. A more favourable attitude to patenting in connection with further uses as a medicament of a known substance had developed at least in the Contracting States Germany and Switzerland, but the Enlarged Board of Appeal can

be assumed to have been aware of the above more restrictive view adopted in other Contracting States.

3.3 The Enlarged Board of Appeal in decision G 5/83 explicitly took into account the critical case in which the medicament resulting from the claimed use is not in any way different from a known medicament (see last sentence of Reasons 20). The Enlarged Board concluded that (Reasons 22) as "the intention of Article 52(4) EPC...is only to free from restraint non-commercial and non-industrial medical and veterinary activities" this exclusion should not be allowed to go beyond its proper limits. Thus (Reasons 23) it was legitimate in principle to allow claims directed to the use of a substance or composition for the manufacture of a medicament for a specified new and inventive therapeutic application, even in a case in which the process of manufacture as such does not differ from known processes using the same active ingredient.

3.4 From the investigations made by this Board, it appears that all the referred cases considered in G 5/83 and the other parallel Enlarged Board of Appeal decisions concerned uses of a known medicament to treat a new illness. The Enlarged Board of Appeal thus had no particular need to distinguish between a case where the intended use was to treat a different illness, and a use to treat the same illness but under a different dosage regime. Reasons 20 of decision G 5/83 explicitly mentions that "Where the medicament itself is novel in the sense of having novel technical features - e.g. a new formulation, dosage or

synergistic combination - the ordinary requirements of Article 54(1) to (4) EPC will be met..." so that dosage was considered in the context of a new product. Whether the Enlarged Board of Appeal also had in mind the patentability of a substance for a use which differed from the prior art only by its dosage regime can only be a matter for speculation. It remains that the ordinary meaning of the language the Enlarged Board of Appeal used in its Reasons 23 and in the Order point 2, and of the very similar language of Article 54(5) EPC 2000, prima facie is broad enough to allow patenting of a substance or composition for use in a new and inventive treatment by therapy characterized by being a new dosage regime for treating the same illness with the same substance. Are there sufficient reasons for giving the language used some more restricted meaning, which excludes this possibility from patentability ?

4. A review of the cases decided following decision G 5/83 throws some light on the categories of novel and inventive therapeutic use, for use in which the manufacture of a known substance or compound was considered patentable.

4.1 Manufacture of a known composition was considered patentable for use in a new therapy where the target group to be treated was different (seronegative pigs instead of seropositive pigs; T 19/86, OJ EPO 1989, 25), a new therapy with a different technical effect (prevention of tooth decay by means of a known substance, but by removing plaque instead of by reducing the solubility of tooth enamel; T 290/86, OJ EPO 1992, 414), or a new therapy with a different mode



- of administration (subcutaneous instead of intramuscular injection; T 51/93).
- 4.2 However, some boards of appeal have regarded the acceptance in principle of patentability as problematic where the specific therapeutic use differing from the prior art is a mere dosage regimen.
- 4.3 With reference to case law and the danger of a collision with Article 52(4) EPC 1973, decision T 584/97 denied patentability for a claim directed essentially to the administration of nicotine in increasing doses. In T 317/95, T 56/97 and T 4/98 (OJ EPO 2002, 139) the issue was discussed, with answers tending towards the negative, but ultimately left undecided. In all of these cases the grant of a patent would have been refused anyway on other grounds - i.e. lack of novelty or inventive step - so that the outcome of a decision on this issue was immaterial.
- 4.4 Decision T 570/92 was concerned with a claim seeking protection for "the use of nifedipine crystals ... for the preparation of solid pharmaceutical compositions ... to obtain (a medicament)... for the oral treatment of ... by once- or twice-daily administration". The Board saw no collision here with Article 52(4) EPC 1973. It construed the wording as providing the skilled person with the teaching that the success of the therapy by administration no more than twice daily was possible, but not as giving instructions to the doctor in the concrete treatment of a patient.
- 4.5 In decision T 485/99 the Board emphasised that the key issue was whether the dosage regimen as defined (pre-

operative administration to achieve a post-operative effect) led to a different medical (physiological) effect. If not, then patenting might restrict the medical practitioner's freedom and would therefore not be permissible. Since the question whether the proposed dosage regimen led to a different medical effect had not yet been investigated, the Board remitted the case to the Examining Division.

- 4.6 A long and detailed treatment is to be found in decision T 1020/03, issued by Technical Board 3.3.4 on 29 October 2004 (OJ EPO 2007, 204), in which decision a pure dosage regimen was recognized for the first time as not excluded from patentability.

Briefly put, the view taken in this decision (see Reasons, point 36) is that "...there is a seamless fit, either a method of using a composition is not a treatment by therapy and therefore falls outside the provision of Article 52(4) EPC first sentence, and so is patentable subject to compliance with the other provisions of the EPC, or else a method is a treatment by therapy and therefore inside the provision of Article 52(4) EPC first sentence, and so not itself patentable, but use of a composition for making a medicament for use in such treatment by therapy is patentable for unspecified therapy as a first medical indication or for a specified therapy as a further medical indication, again subject to compliance with the other provisions of the EPC, in particular novelty and inventive step." For the detailed reasoning leading to this conclusion, and also the reasoning why this decision did not follow certain reasoning stated in decisions T 317/95, T 56/96, T 584/97, T 4/98 and

T 485/99 which it considered as conflicting with decision G 5/83, reference is made to the text of decision T 1020/03 itself.

- 5.1 A contrary view to that expressed in decision T 1020/03 can be stated in two alternative ways. One way of stating it is that for a therapy to be recognized as new for the purposes of Article 53(c) and 54(5) EPC 2000 over a known therapy using the same substance or compound to treat the same disease, there must be some difference other than the dosage regime. The other way of stating it, is that a known therapy for using a substance to treat a disease must for the purposes of Article 53(c) and Article 54(5) EPC 2000 be deemed to make known all possible dosage regimes using that known substance for treating that disease. The justification for either alternative way of expressing the view would be that assessing the right dosage is so much a question between physician and patient that preservation of the physician's freedom to assess the right dosage must take precedence over any right to obtain a patent. Examples of reasoning on the lines of the above view can be found in decisions T 317/95 (see point 4.5), T 56/97 (see points 2.4 and 2.5) and T 584/97 (see point 2.6), and also in the decision of the Examining Division which is under appeal in the present case. On this contrary view it would appear necessary to attribute a very special meaning to "methods of treatment by therapy" for the purposes of Articles 53(c) and 54(5) EPC. There is no hint in the travaux préparatoires for the EPC 2000 in this direction, unless this was implicit in the reference (see point 3.1 above) to "as regards the second or further medical uses, the case law evolved by the EPO

Enlarged Board of Appeal should be enshrined in the Convention". The only relevant case referred to by this appears to be decision G 5/83 (and the parallel cases to the same effect), so that an authoritative interpretation of this is needed, which can only be given by a further decision of the Enlarged Board of Appeal.

- 5.2 Whether medicaments for use in methods of treatment by therapy where the only novel feature is a dosage regime are patentable under Articles 53(c) and 54(5) EPC 2000 is an important point of law, as the situation arises quite frequently. If patenting is to be excluded in such circumstances, then applicants need to know this for certain, so that in cases where the novel dosage regime can be practiced using a new physically different form of the medicament, information on this is included in the application on filing, so that at least for this patent protection can be obtained.
- 5.3 Categorically denying patent protection for medicaments for use in methods of treatment by therapy where the only novel feature is a dosage regime, would make it simpler to refuse patent applications or invalidate patents where it turned out that the only difference from the prior art was the dosage regime, as the normally most difficult issue of obviousness would never have to be addressed. Such categorical denial of patent protection would also avoid problems that courts might have in deciding on what evidence was satisfactory to show that an (old) medicament was being manufacture and/or marketed for use in a new dosage regime. It seems questionable, however, whether regard should be paid to such considerations when

considering the meaning of Articles 53(c) and 54(5) EPC 2000.

5.4 Considerations of public health, of medical confidentiality to preserve the physician/patient relationship, or of preserving the freedom of physicians to treat their patients in the best possible manner, have indeed at various times influenced the legislators in the Contracting States in considering whether it is allowable at all to patent pharmaceuticals let alone therapeutic methods. A reflection of this is to be found, for example, in the reservations allowable for Contracting States for an interim period under the provisions of Article 167 EPC 1973. However these are considerations primarily for the legislator in laying down the law, and not primarily considerations for interpreting the law. If such considerations are to be relied on at all in interpreting the provisions of the EPC, then for the sake of a consistent development of the case law it seems best for the Enlarged Board of Appeal to give authoritative guidance on how to do so.

## Order

### **For these reasons it is decided that:**

The following questions are referred to the Enlarged Board of Appeal for decision:

1. Where it is already known to use a particular medicament to treat a particular illness, can this known medicament be patented under the provisions of Articles 53(c) and 54(5) EPC 2000 for use in a different, new and inventive treatment by therapy of the same illness ?
2. If the answer to question 1 is yes, is such patenting also possible where the only novel feature of the treatment is a new and inventive dosage regime ?
3. Are any special considerations applicable when interpreting and applying Articles 53(c) and 54(5) EPC 2000 ?

The Registrar

The Chairman

N. Maslin

U. Oswald