

PATENTS ACT 1977

IN THE MATTER OF

Patent Application GB 0028560.1 in the name of Fieldturf Holdings, Inc. and a request for it to be treated as a divisional of Patent Application GB 0025032.4 under section 15(4) of the Patents Act 1977

DECISION

Introduction

1. The applicants, Fieldturf Holdings, Inc (“Fieldturf”), filed application GB 0028560.1 on 23 November 2000 requesting that it be treated as a divisional of application GB 0025032.4 under section 15(4) of the Patents Act 1977 (“the Act”).
2. The application GB 0025032.4 (“the first application”) is derived from international application PCT/CA99/00704 having an international filing date of 3 August 1999 and a priority date of 21 September 1998. Amended claims were filed on 17 January 2000 adding further claims 12 to 17, which were independent of and additional to the original claims 1 to 11. The international application was published on 30 March 2000 as WO 00/17452 with both the original and the amended sets of claims. The applicants requested national processing under section 89 of the Act on 12 October 2000. On entering the national phase, the application was given the application number GB 0025032.4 and re-published as GB 2353720 A on 7 March 2001.
3. In an official letter dated 21 May 2001, the examiner objected that GB 0028560.1 (“the second application”) contravened the requirements of Section 76(1) of the Act on the grounds that the claims added subject matter by broadening the scope of the invention. Consequently it was not entitled to an earlier date of filing under Section 15(4). The examiner also stated that, in the event the second application was not entitled to that earlier date, it could nevertheless proceed with its actual date of filing, namely 23 November 2000.
4. Following an exchange of letters between the examiner and the agent, the added subject matter issue was not resolved and the matter came before me at a hearing on 17 January 2002. Fieldturf was represented by Mr T L Johnson and Miss C Evans of the agents, Edward Evans Barker, and Mr R Whaite attended as the examiner.
5. For the sake of completeness, I should add that, in the course of the correspondence on the second application, the examiner warned that, should the application be pursued, WO 00/17452 might be cited against it for lack of novelty. However, this issue was not argued at the hearing and hence forms no part of this decision.

The first and second applications

6. The applications are concerned with synthetic grass turf surfaces for sports events which comprise a flexible carpet-like pile fabric of synthetic ribbons representing blades of grass and with a granular infill simulating soil. The claims of the second application correspond to claims 12 to 17 of the first application which are substantially identical with claims 12 to 17 introduced into the international application. The descriptions of the first and second applications are substantially the same.

7. Claim 1 of the first application reads:

A synthetic grass turf assembly for installation on a supporting substrate to provide a game playing surface, the turf assembly including:

a pile fabric with a flexible sheet backing (1) and a plurality of upstanding synthetic ribbons (2) of a selected length, representing grass blades, extending upwardly from an upper surface of the backing; and

an infill layer (3) of particulate material disposed interstitially between the upstanding ribbons (2) upon the upper surface of the backing and of a depth less than the length of the ribbons (2), the particulate material selected from the group consisting of hard and resilient granules, characterised in that the infill layer comprises:

a base course (4) substantially exclusively of hard granules disposed upon the top surface of the backing;

a middle course (5) of intermixed hard and resilient granules of a selected relative weight ratio, disposed upon the base course (4); and

a top course (6) substantially exclusively of resilient granules disposed upon the middle course (5), an upper portion (7) of the synthetic ribbons extending upwardly from a top surface of the top course.

Claims 2-11 cover preferred features of the assembly.

8. Claim 1 of the second application reads:

A synthetic grass turf assembly for installation on a supporting substrate to provide a game playing surface, the turf assembly including:

a pile fabric with a flexible sheet backing (1) and a plurality of upstanding synthetic ribbons (2) of a selected length, representing grass blades, extending upwardly from an upper surface of the backing; and

an infill layer (3) of particulate material disposed interstitially between the upstanding ribbons (2) upon the upper surface of the backing and a depth (*sic*) less than the length of the ribbons (2), the particulate material selected from the group consisting of hard and resilient granules, characterised in that the infill layer comprises:

a second course (5) of intermixed hard and resilient granules, disposed upon the top surface of the backing (1); and

a first course (6) substantially exclusively of resilient granules disposed upon the second course (5), an upper portion (7) of the synthetic ribbons extending upwardly from a top surface of the top course.

Claims 2-6 cover preferred features of the assembly.

9. Thus, in addition to the removal of the reference to a selected relative weight ratio for the middle course (5), the invention claimed in the second application does not require the base course (4) to be present at all.

The law

10. The relevant sections of the Act for the purpose of the matters in issue at the hearing are sections 15(4) and 76(1), which read:

Section 15(4):

Where, after an application for a patent has been filed and before the patent is granted, a new application is filed by the original applicant or his successor in title in accordance with rules in respect of any part of the matter contained in the earlier application and the conditions mentioned in subsection (1) above are satisfied in relation to the new application (without the new application contravening section 76 below) the new application shall be treated as having as its date of filing the date of filing of the earlier application.

Section 76(1):

An application for a patent which-

(a) is made in respect of matter disclosed in an earlier application, or in the specification of a patent which has been granted, and

(b) discloses additional matter, that is, matter extending beyond that disclosed in the earlier application, as filed, or the application for the patent, as filed

may be filed under section 8(3), 12 or 37(4) above, or as mentioned in section 15 (4) above, but shall not be allowed to proceed unless it is amended so as to exclude the additional matter.

The hearing

11. Miss Evans opened by drawing my attention to *Southco Inc vs Dzus Europe Ltd* [1990] RPC 587 which held that claim broadening before grant was permissible provided the broader invention was disclosed in the application as filed. She submitted that you could therefore amend to omit a feature if it was apparent that that feature was arbitrary and unnecessary. However, you could not omit a feature if it were consistently presented as being essential in the application as originally filed or if it were necessary to fulfil an object of the invention. The examiner concurred with this view.

12. Miss Evans submitted that the invention as claimed in claim 1 of the second application was explicitly disclosed in the first application. Specifically, she drew my attention to page 5, lines 24 and 25 which stated that the base layer of sand could contain rubber particles. Since the middle layer also comprised sand and rubber, she argued that this was therefore an explicit disclosure of both the middle layer and the base layer comprising hard and resilient granules thus supplying support for claim 1 which did not require a distinct base course. I pointed out the first application stated that the middle course had intermixed hard and resilient granules in a selected weight ratio which suggested an element of choice was involved. I contrasted this with the base course which was “substantially exclusively of hard granules” which implied that the layer was pure sand although it did not exclude rubber granules there by accident. Miss Evans submitted that although the application mentioned preferred ratios of sand to rubber in the middle course, there were no limitations to the mixtures contemplated in the first application. Hence she argued that claim 1 of the second application did not add subject matter.

13. Miss Evans also submitted that the invention as claimed in claim 1 of the second application was implicitly disclosed in the first application. Although claim 1 of the first application and pages 4 and 5 of the description mentioned three layers, she pointed out that the specification also referred to “multiple layers” in contrast with the prior art which had one uniformly mixed layer. (By that, I understood Miss Evans to mean “multiple layers” to comprise two or more layers.) The function of the base layer was to give water percolation and drainage and the function of the middle layer was to give support and also drainage. An added function of the middle layer was to control dynamic interaction, to buffer the sand and prevent it migrating to the upper layer. Since the middle and base layers had similar drainage and support functions, and the middle layer had the added function of controlling dynamic interaction, Miss Evans argued that it was only the middle layer which was essential to the invention. It would therefore be clear to a skilled person that you could omit the base layer since it was simply there to provide extra drainage and support which was already provided by the middle layer.

14. Miss Evans argued that the skilled reader would also realise that the invention claimed in the second application met the objects of the invention which were to reduce abrasion and provide a surface which did not deteriorate over time. The top layer of predominantly rubber particles would reduce the abrasive effect of the infill and a middle layer of mixed rubber and sand would prevent the surface deteriorating over time by controlling the dynamic interaction. This interaction would ensure the rubber top surface remained relatively free of sand particles since downward washing of sand particles by water draining from the top surface would return the sand to the middle course. She submitted that since the base layer

was only there to provide extra support and drainage, its presence was arbitrary and therefore not necessary to fulfil the objects of the invention.

15. Additionally, Mr Johnson suggested that the skilled person reading the first application would realise from the references to multiple layers that provided you had a firm base - which could be the ground - then all that was needed was the dynamic system of resilient top layer and the mixed underlying layer. He argued that the application did not say that you needed the base layer.

16. In a second line of argument, Miss Evans sought to persuade me that the invention comprised two problems and two solutions. The first problem was that prior art infills of uniformly mixed sand and rubber particles, when subjected to impact in use, resulted in the sand particles migrating upwards to give undesirable abrasive qualities and an unsightly appearance to the top surface. The solution to this problem was to make the top layer of rubber particles. However that solution gave rise to another problem which was that an infill of rubber particles alone was expensive, had poor drainage and was too resilient in use. The solution to this second problem was to use sand in the rest of the infill below the top layer to provide drainage, support and weight. Since neither solution required the base layer, she argued that the base layer was therefore not essential.

17. Mr Johnson pointed out that applicants could choose how the invention was defined in the claims, or to shift emphasis, provided there was support in the description. In the case of this second application, he argued that the claims fulfilled the objects set out in the original specification and just represented a re-defining of the invention. He submitted that it was not a new invention because the claimed infill functioned to provide the dynamic system.

Decision

18. My decision takes account not only of the submissions at the hearing but also, since I have read all the papers, the arguments raised and the reported cases referred to in all the correspondence filed prior to the hearing. The terms “course” and “layer” have been used interchangeably in the applications and during the course of the hearing and I have taken them to have the same meaning in this decision.

19. I am approaching my decision on the basis that if I find there is added matter, the second application can only proceed under section 15(4) if it is amended to exclude any added matter. If divisional status is not allowed under Section 15(4), then the date of filing of the second application will be the date the application was lodged with the UK Office, ie 23 November 2000.

Added subject matter

20. I am not persuaded that the claims of the second application are supported by the first application. In my view, and in this I agree with the examiner, the invention essentially comprises a three-layer infill having a base course substantially exclusively of hard granules eg sand, a top course substantially exclusively of resilient granules eg rubber, and a middle course having intermixed hard and resilient granules eg sand and rubber. I can find nothing in the first application to depart from the clear statement that, in use, dynamic interaction between

the top and base courses is buffered by the middle course to prevent excessive migration of abrasive sand towards the top surface level.

21. Miss Evans sought to persuade me that there is explicit disclosure of a top layer with just one underlying layer by arguing that in effect the base layer of sand which can contain some rubber particles merges into the middle course of mixed sand and rubber particles so that they become indistinguishable. I cannot accept this interpretation of the specification of the first application. In my opinion, there is a clear distinction between a base layer which is “substantially exclusively” hard granules eg pure sand or sand mixed with small quantities of rubber granules *without significantly effecting (sic) the functioning of the sand layer* (my italics), and a middle course of intermixed sand and resilient rubber granules in a selected weight ratio. The first application clearly states that the middle course acts as a buffer to keep the base sand and the top rubber courses separate and I am unable to reconcile this buffering function between layers with the argument that the infill essentially comprises two layers.

22. I am also not persuaded that the invention as claimed in the second application is implicitly disclosed in the first application. I do not accept that the skilled reader of the first application would realise that the objects of the invention could be met by a two-layer structure with the lower of those two layers fulfilling all the necessary functions ascribed separately to the middle and lower courses. I can find no reference in the first application which points to the possibility that the base layer is anything other than essential. I therefore cannot agree that the base layer is an arbitrary component of the infill as Miss Evans argued.

23. Although, taken in isolation, the references to multiple courses could indicate the presence of two or more courses, I do not think that, when read in the context of the whole specification of the first application, it is anything other than a short-hand way of identifying the infill comprising top, middle and base courses. I therefore am not persuaded by Mr Johnson’s argument that multiple layers means “two or more” with the ground providing the necessary support function for the carpet, thus allowing the support function of the base layer to be dispensed with.

24. I do not share the agents’ view that the invention comprises two separate problems and solutions and that the relevant solution does not need a base layer. I accept that the prior art identifies problems with the use of a single layer of pure rubber particles or a single layer of mixed rubber and sand. However, I am unable to find anything in the first application to point towards a solution involving a two layer infill as suggested by Miss Evans. In my view, all three layers are essential to provide the dynamic interaction necessary to solve the problems of the prior art.

Amendment of second application

25. Since section 76(1) allows a divisional application to proceed under section 15(4) if it is amended so as to exclude any added matter, I therefore invited the agents to submit amendments should I find that the second application as filed contained added matter. Mr Johnson proposed amending line 10 of claim 1 to read “... the infill layer comprises multiple courses including a second course (5) of intermixed hard and resilient granules above the top surface of the backing ...”. The word “above” thus replaces the words “disposed upon”.

26. In my view, the amendment does not overcome the section 76(1) objection. Although it could be argued that the mention of multiple courses in the first application might support

such an amendment, in my view, the amended claim still says that the infill comprises two (or more) courses. As mentioned above, taking the first application as a whole, I do not think the reference to “multiple courses” is anything other than a shorthand way of identifying the infill comprising top, middle and base courses all of which, in my opinion, are essential to the invention.

Conclusion

27. For the reasons given above, I direct that GB 0028560.1 shall not proceed as a divisional application under section 15(4). Consequently, if Fieldturf wish to proceed with this application, it must carry its own date of filing, namely 23 November 2000.

Appeal

28. This being a substantive matter, any appeal should be lodged withing six weeks of the date of this decision

Dated this 25th day of March 2002

MRS S E CHALMERS

Deputy Director, acting for the Comptroller

THE PATENT OFFICE