Examiner's Report 2021
FD3 – Amendment of Specifications

Patent Examination Board

Introduction

The invention related to a drain-clearing device with a user-operated valve allowing water under pressure to pass through the device to unblock a drain or toilet. Defining the invention needed consideration of the balance of structural and functional features, in particular of the valve, and of the relative importance of the elements of the device. These are discussed below.

A few general points can be made here.

Many candidates included in their Answer document not only a copy of the pending claims but also the Instructions to Candidates, which was not necessary.

Candidates are reminded that starting each section of the paper (i.e. claims, letter, memo) on a fresh page helps the Examiner to identify more easily which part of the answer they are reviewing, and award marks accordingly. It was not, however, necessary to include a clean copy of the amended claims (unless they had been extensively altered).

A number of candidates appeared to have difficulty marking up their amendments: deletions in balloons. However, candidates can be assured that they would not be penalised for formatting problems.

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Claim 1

Most candidates opted for a claim 1 in which the valve is specified more closely, as is consistent with the client's comments on D1 and D2. The form of the valve as a tubular stem with a port slidable up and down by the user to occlude or expose the water supply from the side arm seems the best option. That the valve is at the top of the elongate pipe distinguishes over D1 but arguably not D2, so was thought to be of lesser importance.

A number of candidates introduced both the (slidably mounted) stem and its port into claim 1, but then provided no detail of how these features functioned to open or close the valve. Simply including a stem with a port was not considered to adequately capture the operation of the device, and such claims therefore attracted fewer marks.

The term "plunger valve" was argued by some to be a term of the art. However, the Examiners did not feel that the use of this term alone, without the inclusion of the stem and port and its operation, was sufficient: both D1 and D2 show valves with stems moving up and down in operation, albeit in D1 to close rather than open the valve. Candidates are reminded to take the information provided by the paper at face value and not to rely upon any specialist knowledge they may have.

Less successful answers focused on features such as the diameter of the valve port or the position of the valve. For instance, several candidates attempted to rely upon an amendment in which the diameter of the port 6'' is specified to be at least as great as the internal diameter of the side arm 10, arguing that this limitation ensures good throughput of water/fluid from the side arm into the drain. If no information is included as to the location and configuration of the stem and port, however, such a claim does not bring out the advantage of the invention. Moreover, while such amendments may confer novelty, inventive-step arguments are weak. Also, candidates should keep in mind whether an amendment results in a claim that would be easy for a third party to "work around".

Some candidates provided a good main amendment, but also introduced what were considered to be unnecessary limitations, such as replacing "drain-clearing device" with "toilet-clearing device", or including additional features, such as the stem having a closed end, or a knob; or a longitudinal rib. Such claims received fewer marks as a result.

It was considered appropriate to remove the term "hemispherical" from claim 1, based on page 6, lines 28-30 and page 8, lines 28-31. This broadening attracted 4 marks. Candidates who replaced hemispherical with (for example) solid and convex were awarded fewer marks for this amendment.

The (hemispherical and solid) shape of the sealing member is a distinguishing feature; however, it is not very different from that in D2, so while it might form a useful dependent claim (if removed from claim 1), it does not seem to support an inventive step on its own, and in any event seems too easy to work round.

A few candidates pointed out that the stem did not need to have a hole if it was capable of travelling up beyond the side arm. This is certainly a useful insight though problematic

in terms of finding suitable wording.

Dependent claims

In the dependent claims there were a number of marks to be gained by adding claims to useful features, including the "kit" aspect, but also by dealing with the clarity objection and expanding the claim dependencies as appropriate.

Response

In the letter to the UKIPO there were in many cases some very good and clear arguments.

Nearly all candidates had no problem finding support for their chosen amendments. However, care needs to be taken when selecting features from a general description. For instance, a passage such as page 7 lines 20ff contains many details of the valve, and, if only some are selected for claim 1, some justification for the selection needs to be given.

On novelty, many candidates assumed that because D2's device is designed for use with compressed air then a claim 1 mentioning water is novel. This is doubtful at best, even if the D2 device is not well adapted for use with water.

It is good practice in a response to point out all novel features of the claim being defended, even if one is theoretically sufficient for novelty, and especially if those features have a synergistic effect, as this prepares the ground for inventive-step arguments.

Some argued that D1 valve's position prevents it "controlling" the flow of water as claimed. There is surely some element of control, at least in the reverse flow direction. More broadly, the effect of the D1 valve does not depend on its position, as long as it is in the flow path.

More than one candidate began their inventive-step analysis with reference to Pozzoli (the UK approach to inventive step), then proceeded to identify the closest prior art (by comparing technical field and number of structural differences) and technical problem to be solved, in line with the EPO problem-solution approach. Candidates are of course free to use either the UK or EPO approach to inventive step, but apparent confusion between the two does not usually lead to full marks for this section of the paper.

It can sometimes be that candidates who use the problem-and-solution approach do not pick up as many marks in inventive step as a consequence of the structure of their argument. For instance, they may go straight to a combination of documents rather than looking at inventive step starting from each document individually. There also tends to be a focus on the technical problem, stating that that is not addressed in the prior-art document, rather than saying what the prior art actually does do. Candidates tend to have more boilerplate for Problem and Solution (probably because they are using it more day to day) than for Pozzoli. Comments like "this document doesn't teach or suggest the

problem" do not necessarily attract marks.

A few candidates amended the claims to state that the valve was at the top of the pipe and the seal was at the bottom to differentiate over D1. Although this was novel over D1, these candidates tended to get into problems differentiating over D2 and usually ended up with a discussion about what counted as the pipe in D2 and/or used water/air only to differentiate over D2. This is perhaps a good reminder of the need for an amendment that is clearly novel over both documents.

Nearly all candidates rightly realised that they needed to appoint themselves as representative using PF51. A number of candidates, however, did not address the clarity objection in the response letter.

Report

Candidates are reminded that what was requested was "Notes on which you would base advice to your client". Certainly no one would be penalised for writing a letter, but this is likely to take more time than necessary, and also notes can include points that underlie the response, which one might not pass on directly to the client in real life.

Comments on novelty and inventive step which have already been made in the response letter are unlikely to receive additional marks when copied *verbatim* into the client notes. On the other hand, explanations of why certain objections are made, such as why the presence of the ball in D2 does not make the client's claim 1 novel, show an awareness of issues and client care.

As for previous years, a number of marks were available for discussing whether the novelty and inventive-step objections were correct, and whether amendment is required at all. Some candidates addressed this part of the notes very well, providing their own opinion on novelty over D1/D2, but other candidates did not gain available marks in this section by simply repeating the objections, or stating that claim 1 lacks novelty, without explaining why.

Most candidates answered the client's query regarding the antecedence issue with claim 7, but not all explained why (or whether) D2 could be considered "suitable for" use with water rather than air and hence undermine claim 1 despite its stated method of operation. In a few scripts it was hard to detect any link between the strategy pursued and what the client said in her letter.

On the other hand, a significant number of candidates who chose amendments considered by the Examiners to fall short of providing the expected novel and inventive claim were still able to achieve a pass mark by explaining their rationale in the client notes. For that reason at least, it is important for future candidates to keep in mind the importance of providing thoroughly reasoned answers, both in the UK IPO letter (where a thorough explanation of novelty and inventive step grounded in the terms of the claims is needed to maximise marks) and the client notes, where flagging to the client the risks and

benefits of the approach chosen by the candidate can make the difference between a Pass and a Fail.