
1. INTRODUCTION

In paper A the candidate, on the basis of information in a letter from a client, should have prepared a patent application to be filed with the EPO. The most important issue was to define the invention in one or more independent claims and dependent claims which meet the requirements of the EPC and have a fair chance of being allowable. The candidate was also expected to provide an introductory part to the description including an acknowledgment of the relevant prior art documents and a statement of the problem to be solved by the invention.

This year the marking schedule of the paper was changed to a maximum of 100 points. The three sections were awarded the following number of points respectively:

drafting of independent claim(s): 50 points

drafting of dependent claims: 35 points

drafting the introductory part of the description: 15 points.

2. GENERAL CONSIDERATIONS

The client's invention related to the field of cellular radio telephones, commonly known as mobile phones, and was directed to a reader unit for such a telephone for reading subscriber related information stored in a memory module. The memory module could have the form of a data card, such as a plug-in chip card or a credit card. Also a third intermediate dimension was considered. These data cards were also referred to as SIM (Subscriber Identity Module) cards. Since the card could be passive or active, two-way communication between the card and the reader/telephone was also possible.

According to the client's letter, the invention to be protected was the concept of having the reader operated with at least two cards of different sizes and to make sure that a card not in use (particularly the smaller plug-in card) was protected from damage and could not be lost. To achieve this object, the client proposed a reader having a single set of terminals cooperating with the cards, one card (the smaller plug-in card) being movable between a reading position and a storage position in the reader, in which latter position a second card could be inserted into the reader to be read.

From the documents DI and DII cellular telephones were known which could operate with different kinds of cards.

In DI an adapter was provided for each type of card and was removably mounted in the telephone. Two different adapters were shown to have similar exteriors and were alternatively insertable in the same compartment of the telephone. One adapter was arranged to receive from one end a data card of the credit card size. In the other adapter a chip card of small size was insertable into a pivotable holder, which through an opening in the housing wall could be pivoted from a reading position to a swung open position, in which the card was accessible to the user.

DII showed a telephone having several readers, each selectively communicating with a respective SIM-card. A plug-in SIM-card was permanently located inside the housing of the telephone, whilst the other SIM-cards were easily accessible in respective readers located remote from the housing or mounted therein.

3. INDEPENDENT CLAIM(S)

From the first paragraph of the client's letter it was clear that protection was desired for a reader for reading data cards, or more generally memory modules, and most candidates chose to direct independent claim 1 to such an entity. As to the terminology, the examiners, in marking the scripts, did not make any distinction between the terms memory module, SIM-card, data card and chip card, or between the terms cellular radio telephone and mobile phone.

It is true that the client's reader was described in the letter as being applied to a mobile telephone, but other applications could be envisaged. Therefore, to receive the maximum number of points, claim 1 should have been directed to a memory module reader or similar. Where claim 1 was directed to such a reader for, or suitable for, a mobile telephone, no deduction was made.

A claim directed to a mobile phone including a reader for data cards had a narrower scope of protection than a claim directed to a reader per se, and thus received less than the maximum number of points.

Claims directed to "reading and writing means" were held to be too restricted, since writing was not necessary. Such claims received a deduction. Claims directed to "reading or writing means" and "reading/writing means" were not held to be restricted and so were not subjected to deduction.

Claims directed to entities such as "means for a mobile phone", "electronic component" or "adapter" were held to be equivalent to claims directed to a reader, as long as their content defined the means required for the invention.

In very few cases the independent claim was directed to other aspects, such as

the cover of the reader being formed by a battery pack, or
the power supply being interrupted when a module is exchanged.

Such claims which failed to define the core of the client's invention were heavily penalized. Candidates are reminded that failure to claim what the client clearly wishes to have protected is considered a major mistake.

The invention of this paper did not lend itself to be defined in a process claim, since a process claim would have only set forth how the apparatus was to be operated. Therefore the very few process claims which have been proposed in addition to an apparatus claim were ignored.

3.1 INDEPENDENT CLAIM DIRECTED TO A READER

In the light of the prior art according to the two documents DI and DII, the client's reader could be claimed in two different ways. One solution was that a memory module received in the reader was movable between two positions in the reader. Another solution was that one and the same set of terminals could be used for reading data from memory modules having different formats. Accordingly claims directed to a memory module reader (for a cellular telephone) drafted in a suitable way to include one of the following two alternative sets of features were held to correctly define the invention.

Version (i), below referred to as "the storage solution"

- The reader includes reading means and means for receiving a memory module;
- the receiving means is movable between a first position in the reader in which the module can be read by the reading means and a second position in the reader;
- in the second position of the receiving means another module can be read by the reading means.

Acceptable variations were i.a. that

- the reading means is expressed as a set of terminals or contacts or similar
- another module is insertable in the reader when the receiving means is in the second position;
- the second position is defined as a storage position.

Version (ii), below referred to as "the two-formats solution"

- The reader includes means for receiving a memory module and at least one terminal for contacting the module to read it;
- the receiving means is configured to receive a module of a first format for contacting said terminal;
- the receiving means is also configured to receive an alternative module of an alternative format for contacting said terminal.

Acceptable variations were i.a. that

the claim refers to a set of terminals, contacts or similar.

3.2 NOVELTY

Lack of novelty is always considered to be a serious deficiency and, in this paper, caused a loss of more than half the points available for the independent claim(s). Candidates are again reminded that it is important to read the prior art carefully and completely.

3.3 CLAIMS MERELY STATING THE PROBLEM OF THE INVENTION OR THE RESULT TO BE OBTAINED

An independent claim which only stated a problem to be solved or a result to be obtained without defining the relevant means required for solving the problem or achieving said result received a penalty corresponding to the seriousness of the deficiency. For example, in a specific case, the independent claim only specified that the reader was suitable for reading modules of different formats.

3.4 UNDULY RESTRICTED CLAIMS were penalized by deduction of points for each unnecessary feature, as set out below. The following unnecessary limitations were held to be of major importance, and so called for a high deduction:

- claim directed to a telephone (as already mentioned);
- means for reading and writing;
- receiving means or holder of a memory module being pivotable or connected by a hinge to the reader;
- shape of the holder ;
- holder having a closure member;
- retaining means for the holder or a module;
- battery pack covering the compartment accommodating the reader;
- antenna or battery (in a claim directed to a reader);
- recess for holder or module (in case of the two-formats solution (ii)).

The following unnecessary limitations were held to be less important and so resulted in a minor deduction:

- movable holder (in case of the two-formats solution (ii))
- notch for facilitating extraction of the holder;
- antenna or battery (in a claim directed to a telephone);
- recess for holder or module (in case of the storage solution (i));
- memory modules with different formats (in case of the storage solution (i)).

3.5 FORMAL MATTERS

Formal deficiencies, such as clearly incorrect two-part form of the claim caused a small deduction.

3.6 PROPOSALS FOR SEPARATE APPLICATION(S)

Candidates who proposed a separate application for the alternative solution were rewarded with a few points.

4. DEPENDENT CLAIMS

Dependent claims were expected on the following aspects:

- a telephone including the claimed reader;
- mounting of the receiving means or holder of the memory module (pivot or hinge, movement over 180 degrees);
- shape and size of the holder (channels, flanges, suitable for a plug in SIM card);
- closure of the holder (flap, snap-fitted member);
- storage of the holder (recess, notch);
- retaining member for the card/holder (slot, resilient bias);
- reader arranged to read modules of different formats (only in case of the storage solution (i));
- storage of a module in the reader (only in case of the two-formats solution (ii));
- cover of the reader (battery, seal).

Full marks were only available for properly developed and structured fall-back positions.

5. DESCRIPTION

A proper acknowledgement of both prior art documents DI and DII was expected.

Full marks could only be achieved by a good presentation of the problem and its solution consistent with the independent claim(s) drafted by the candidate. The problem should normally have been derived from one of the prior art documents provided.

Paper A (Electricity/Mechanics) 1999 - Schedule of marks

Category	Maximum possible	Marks awarded		Marking by further examiners if any	
		Marker	Marker	Marker	Marker
Independent claims	50				
Dependent claims	35				
Description	15				
Total	100				

Sub-Committee for Electricity/Mechanics agrees onmarks and grade

	PASS
	COMPENSABLE FAIL
	FAIL

The Hague, 2 September 1999

J. Combeau - Chairman of Examination Committee I