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**Datasheet for the decision  
of 11 July 2013**

**Case Number:** T 2061/08 - 3.5.01

**Application Number:** 04025198.5

**Publication Number:** 1533734

**IPC:** G06F 17/60

**Language of the proceedings:** EN

**Title of invention:**

System and method for unsteadiness compensation in the  
valuation of futures contracts

**Applicant:**

DEUTSCHE BÖRSE AG

**Headword:**

Contract valuation/DEUTSCHE BÖRSE (III)

**Relevant legal provisions:**

EPC Art. 52(2)(3)

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

EPC Art. 56

**Keyword:**

"Technical character of method claim - no"  
"Inventive step of system claim - no"

**Decisions cited:**

T 0641/00, T 0388/04

**Catchword:**

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Case Number: T 2061/08 - 3.5.01

**D E C I S I O N**  
of the Technical Board of Appeal 3.5.01  
of 11 July 2013

**Appellant:** DEUTSCHE BÖRSE AG  
(Applicant) Neue Börsenstraße 1  
D-60487 Frankfurt am Main (DE)

**Representative:** Grünecker, Kinkeldey,  
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**Decision under appeal:** Decision of the Examining Division of the  
European Patent Office posted 30 May 2008  
refusing European patent application  
No. 04025198.5 pursuant to Article 97(2) EPC.

**Composition of the Board:**

**Chairman:** S. Wibergh  
**Members:** K. Bumès  
A. Pignatelli

## Summary of Facts and Submissions

I. The appeal is against the decision of the examining division to refuse European patent application No. 04025198.5 entitled "*System and method for unsteadiness compensation in the valuation of futures contracts*", published as

A1: EP-A1-1 533 734.

II. The examining division refused the application in particular for lack of inventive step (Article 56 EPC 1973). The examining division did not identify any non-obvious technical contribution by dependent claim 7 since the claimed system was not directed to any technical area but carried out data processing with the overall aim of valuing a basket of credit default swaps. The technical implementation was regarded as a matter of common general knowledge.

As independent claims 1 and 8 had a broader scope than claim 7, they were likewise considered to lack an inventive step for the same reasons.

III. The appellant requests that the decision under appeal be set aside and that a patent be granted on the basis of the claim set underlying the decision under appeal, i.e. original claims 1 to 14 and amended claim 15 filed on 6 March 2007.

(a) System claim 1 reads:

"1. A data processing system (100) for valuing a bundle of constructs that may individually fail, in case of a separation event causing said bundle of

constructs to separate a failing construct from the bundle, the system comprising:

a present value determination unit (140) for applying a predefined model to determine a present value of said bundle of constructs after having separated said failing construct from the bundle;

a static value determination unit (140) for determining a static value by reducing a static base number each time a separation event occurs; and

a calculation unit (140) for calculating a value of said bundle of constructs based on the determined present value and the determined static value, said calculation unit being adapted to calculate a sum of the determined present value and the determined static value."

(b) Independent method claim 8 reads:

8. A data processing method for valuing a bundle of constructs that may individually fail, in case of a separation event causing said bundle of constructs to separate a failing construct from the bundle, the method comprising:

applying (210) a predefined model to determine a present value of said bundle of constructs after having separated said failing construct from the bundle;

determining (200) a static value by reducing a static base number each time a separation event occurs; and

calculating (230) a value of said bundle of constructs based on the determined present value and the determined static value, wherein calculating the value of said bundle of constructs comprises calculating a sum of the determined present value and

the determined static value."

- IV. The appellant presents the claimed data processing system as a surprisingly simple solution which compensates for unsteadiness in the *present value* by a step concerning the *static value*. This step can be considered to be a synthetic unsteadiness intentionally introduced to compensate for the unintentional unsteadiness in the present value.

Thus, the invention is said to provide the technical teaching of how to reduce the observable influence of a separation event when valuing a bundle of constructs, irrespectively of the nature of the constructs (hardware arrangements, software routines, or credit default swaps).

According to the appellant, a feature can only be characterised as non-technical if it relates specifically to excluded subject-matter. In the present case, the claimed features encompass technical embodiments and, thus, have technical character.

- V. The Board summoned the appellant to oral proceedings (appointed for 18 July 2013), as requested on an auxiliary basis. In an annex to the summons, the Board voiced doubts about the presence of an inventive step in the system of claim 1 and about the technical character of the method defined in independent claim 8.

- VI. In a letter received 4 June 2013, the appellant informed the Board that it did not intend to attend the oral proceedings and withdrew its corresponding request. The oral proceedings were then cancelled.

## **Reasons for the decision**

### 1. *The application*

The application relates to data processing systems and methods for valuing a bundle of constructs that may individually fail (A1, paragraph 0001). A construct may be a hardware or software arrangement in a computer system or, on an abstract level, a conditional relationship between physical or non-physical entities (A1, paragraph 0002). In particular, a bundle of constructs may be a futures contract based on a basket of credit default swaps (A1, paragraph 0004).

When valuing a bundle of constructs, a value is to be determined that describes one or more properties of the bundle. Taking the example of a bundle of hardware constructs, the bundle may be valued according to a degree of functionality, completeness, utility, usability, overall response time, data processing capacity, or the like. Taking the example of a bundle of software routines, the value may describe a degree of errorlessness [sic], processing speed, or the like. In the example of a basket of credit default swaps, the value may be the price of the futures contract (A1, paragraph 0006).

A failing construct may be separated from the bundle (A1, paragraph 0005) resulting in an unsteadiness of the value of the bundle (paragraph 0007). As such unsteadiness is often undesirable, the application aims at a valuation technique for a bundle of constructs where the observable influence of a separation event is reduced (A1, paragraph 0008).

According to original claim 1, a data processing system for valuing a bundle of constructs that may individually fail calculates a value of the bundle by summing a present value of the bundle (having separated the failing construct from the bundle) and a static value (which decreases each time a separation event occurs). The description exemplifies the static value of a portfolio (A1, paragraph 0053): "the static nominal represents the nominal of the survived obligors". For instance, if the static base nominal is 100, and one of the obligors (which has a weighting of 1%) defaults, the static nominal is reduced by 1, leading to a new static value of 99. Thus, the static value reflects the nominal reduction of the futures contract in a credit event, and thus reflects the consequences of a credit event.

The application provides an extensive "Glossary of terms" (A1, paragraphs 0066 to 0146) to explain the financial vocabulary used by the description in relation to futures contracts.

2. *Construction of system claim 1*

As pointed out by the application (A1, paragraphs 0002, 0004) and the statement of grounds of appeal, the bundled constructs to be valued may be technical or non-technical (including financial futures).

The bundle valuation is achieved by summing

- a *present value* of the bundle, determined according to some (mathematical, financial) model, and
- a decreasing *static value* reflecting the

decreasing size of the bundle when a construct is separated from the bundle (because a financial construct has failed, for example).

3. *Article 56 EPC 1973 - Inventive step*

3.1 The system according to claim 1 is defined in such general terms that the claim is not limited to a technical contribution. The Board does not see any technical effect in reducing the observable influence of a separation event when valuing a bundle of constructs (A1, paragraph 0008). Even if claim 1 were limited to the valuation of *technical* constructs, the overall purpose of the claimed system would still be commercial or administrative rather than technical.

Consequently, calculating the value of a bundle of constructs according to some financial, mathematical, mental or administrative model or algorithm is a non-technical aspect that does not enter into the examination for an inventive step (T 641/00-*Two identities/COMVIK*, Headnote 1, OJ EPO 2003, 352).

The mere *possibility* of a technical embodiment is not sufficient to confer a technical character onto a general concept, cf T 388/04-*Undeliverable mail/PITNEY BOWES* (OJ EPO 2007, 016), Headnote 2:

"Subject-matter or activities that are excluded from patentability under Article 52(2) and (3) EPC remain so even where they imply the possibility of making use of unspecified technical means."

3.2 On the implementation level, the application does not teach any inventive technical consideration, either. It



rather leaves the implementation of the desired data processing system to the skilled reader. In fact, computers constitute notorious technical means for automatic data processing, and the algorithm claimed does not require any inventive programming or non-obvious hardware (which is not disclosed anyway).

3.3 The Board concludes that claim 1 does not involve an inventive step.

4. *Construction of method claim 8*

Claim 8 relates to a data processing method without specifying any technical means for performing the valuation and calculation steps required by the claim.

Therefore, the claim relates to a mental, mathematical or business method as such, i.e. to a non-invention according to Article 52(2)(3) EPC.

## **Order**

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

The appeal is dismissed.

The Registrar:

The Chairman:

T. Buschek

S. Wibergh