

United States District Court,  
S.D. California.

**SANYO ENERGY (USA) CORP,**  
Plaintiff.

v.

**BYD COMPANY LIMITED,**  
Defendant.

No. 02CV1900-B(JMA)

**Aug. 18, 2003.**

Laurence H. Pretty, Stuart Lubitz, Hogan and Hartson, Los Angeles, CA, for Plaintiff.

Edward C. Kwok, Macpherson Kwok Chen and Heid, San Jose, CA, for Defendant.

### **ORDER CONSTRUING PATENT CLAIMS AND TERMS FOR JURY TRIAL**

**RUDI M. BREWSTER, Senior District Judge.**

This matter came on regularly for hearing on July 1, 2003 pursuant to *Markman v. Westview Instruments*, 52 F.3d 967 (Fed.Cir.1995). The purpose of the hearing was to prepare jury instructions interpreting the pertinent claims of each of the two patents at issue. In addition, the Court and parties prepared a case glossary defining terms that were considered too technical for a lay jury to understand clearly without specific definition.

At the time of the *Markman* hearing the parties had not completed discovery; however, they believed that only a few claims were at issue. This Order is without prejudice to reopen for additional claims if it should appear from the remaining discovery that additional claims are at issue.

The resulting jury instructions for the claims at issue in the two patents are attached hereto as Exhibit A. Attached hereto as Exhibit B is the aforementioned case glossary of pertinent technical terms.

IT IS SO ORDERED.

#### **Exhibit A**

#### **Claim Interpretation for the '138 Patent**

#### **Claim 1-Original Language**

#### **Claim 1-Jury Instruction**

A lithium secondary battery comprising:

A lithium secondary battery comprising:

a negative electrode composed mainly of a carbon material consisting essentially of a graphite having

(a) a d-value of the lattice plane (002) obtained by X-ray diffraction thereof of 3,354 to 3,370 and

(b) a crystallite size in the c-axis direction obtained by X-ray diffraction thereof of at least 200 <

a positive electrode composed mainly of a compound capable of occluding and discharging lithium and which is different from the graphite of the negative electrode;

a separator between said positive electrode and said negative electrode; and

an electrolyte solution of an electrolyte solute dissolved in a solvent, said solvent comprising ethylene carbonate in an amount of 20% to 80% by volume based on the volume of the solvent.

a negative electrode composed mainly of a carbon material consisting essentially of a graphite *which excludes the presence of ingredients that would materially affect the basic characteristics contributed to the electrode by the graphite and* having

(a) a d-value of the lattice plane (002) *measured on the raw material* obtained by X-ray diffraction thereof of 3,354 to 3,370 and

(b) a crystallite size in the c-axis direction *measured on the raw material* obtained by X-ray diffraction thereof of at least 200 <

a positive electrode composed mainly of a compound capable of occluding and discharging lithium and which is different from the graphite of the negative electrode;

a separator between said positive electrode and said negative electrode; and

an electrolyte solution of an electrolyte solute dissolved in a solvent, said solvent comprising ethylene carbonate in an amount of 20% to 80% by volume based on the volume of the solvent.

## **Exhibit A**

### **Claim Interpretation for the '138 Patent**

#### **Claim 6-Original Language**

A lithium secondary battery comprising:

a negative electrode composed mainly of a carbon material consisting essentially of a graphite having

(a) a d-value of the lattice plane (002) obtained by X-ray diffraction thereof of

#### **Claim 6-Jury Instruction**

A lithium secondary battery comprising:

a negative electrode composed mainly of a carbon material consisting essentially of a graphite *which excludes the presence of ingredients that would materially affect the basic characteristics contributed to the electrode by the graphite and* having

(a) a d-value of the lattice plane (002) *measured on the raw material* obtained by X-ray diffraction thereof of 3,354 to

3,354 to 3,370 and

3,370 and

(b) a crystallite size in the c-axis direction obtained by X-ray diffraction thereof of at least 200 <

(b) a crystallite size in the c-axis direction *measured on the raw material* obtained by X-ray diffraction thereof of at least 200 <

(c) an average particle diameter of 1 (mu)m to 30 (mu)m

(c) an average particle diameter *value measured on the raw material graphite to be between J and 30 millionths of a meter*

a positive electrode composed mainly of a compound capable of occluding and discharging lithium and which is different from the graphite of the negative electrode;

a positive electrode composed mainly of a compound capable of occluding and discharging lithium and which is different from the graphite of the negative electrode;

a separator between said positive electrode and said negative electrode; and

a separator between said positive electrode and said negative electrode; and

an electrolyte solution of an electrolyte solute dissolved in a solvent, said solvent comprising ethylene carbonate in an amount of 20% to 80% by volume based on the volume of the solvent.

an electrolyte solution of an electrolyte solute dissolved in a solvent, said solvent comprising ethylene carbonate in an amount of 20% to 80% by volume based on the volume of the solvent.

## Exhibit A

### Claim Interpretation for the '729 Patent

#### Claim 1-Original Language

#### Claim 1-Jury Instruction

1. A cell comprising:

1. A cell comprising:

a positive electrode;

a positive electrode;

a negative electrode;

a negative electrode;

a separator filled with an electrolyte;

a separator filled with an electrolyte;

an outer can which has a bottom and which is composed of one of aluminum and an aluminum alloy; and

an outer can which has a bottom, *which is the portion of the outer can that is opposite from a lid, and which is made of aluminum or aluminum alloy without requiring the absence of other materials that do not materially affect its character as aluminum or aluminum alloy;* and

a first lead plate for utilizing current, said first lead plate being welded to an outer surface of said outer can, and also welded to a second lead plate for electrically connecting said cell with a protective circuit.

a first lead plate for *conducting* current, said first lead plate being welded to an outer surface of said outer can, and also welded to a second lead plate for electrically connecting said cell with a protective circuit.

## Exhibit B

### Glossary of Technical Terms

Term	Definition
angstrom	(<) A unit of measurement equivalent to one ten billionth of a meter, useful for distances on the scale of atoms. There are 10,000 < in 1 (mu)m.
anion	A negatively charged ion
anode	The negative electrode of a battery
bottom	The portion of the outer can that is opposite from a lib
can	The outer container or housing of the battery
cathode	The positive electrode of a battery
cation	A positively charged ion
crystallite size	A value which measures the numbers of layers of carbon atoms in a crystal of graphite
d-value	A value which measures the distance between layers of carbon atoms in a sample of graphite
electrode	A portion of a battery through which electrical current flows, used to connect a battery to an electronic device. Batteries contain two electrodes the positive electrode, or cathode, and the negative electrode, or anode. Negative ions flow towards the anode while positive ions flow towards the cathode.
electrolyte	A material which allows electrical current to flow between electrodes in a battery
graphite	A form of pure carbon with a very uniform molecular structure. The carbon atoms in graphite form flat planes, or layers. Multiple parallel layers are combined to form a single graphite crystal, each layer being separated from the others by a specific distance. Samples of graphite

are generally described with two values, the d-value and the crystallite size. The c-axis of a graphite crystals refers to an axis perpendicular to the parallel layers of carbon atoms.

micron  
(( $\mu$ )m)      A unit of measure equivalent to one millionth of a meter

solute      A material which is dissolved in another material (called the solvent); e.g. the sugar in sugar water

solvent      A material in which another material (the solute) dissolves; e.g. the water in sugar water

X-ray  
diffraction      A method for using x-rays to measure distances between atoms

S.D.Cal.,2003.

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