

Annex 7

Intellectual Property contributed to the RD51 Collaboration:

CERN

○ GEM technology

(1) The first ‘patent family’ covers the use of GEM foils as gas detectors. In the US, 2 patents have been granted: US6198798 (Planispherical parallax-free X-ray imager based on the gas electron multiplier) **and** US6011265 (Radiation Detector of very high performance). A PCT application has been filed, and is now being examined at the national level.

Furthermore, the use of GEM foils as gas detectors is also covered by a patent owned by CNRS (the CAT patent). CERN and CNRS have concluded an agreement in 2006, whereby CERN has obtained a sub-licensable license for the CAT technology. Under this agreement, CERN can manufacture and sell GEM foils with attached licenses covering both the GEM and the CAT patents.

Applicable restriction: no exploitation of the GEM technology can be carried out in the field of ‘dosimetry in water phantom’.

(2) A second ‘patent family’ covers part of the method implemented by CERN for manufacturing GEM foils (MCML patent WO03055288: Method for making a multilayer module with high-density printed circuits).

Applicable restriction: no use of this method may be made in Poland.

(3) CERN is also considering filing a patent concerning the manufacture of large area GEM foils. This could be relevant for both the RD-51 programme and for the exploitation of the Collaboration’s results.

Saclay

1. BD1151

Inventors : I. Giomataris, Ph. Rebourgeard, J. P. Robert et G. Charpak

« Détecteur de position, à haute résolution, de hauts flux de particules ionisantes »

EN 95 11928 du 11/10/1995, Brevetome : B 12271PV, Publi INPI N° 2 739 9412,

Joint ownership CEA, BIOSPACE

2. BD1203

Inventors : I. Giomataris, Ph. Rebourgeard, J. P. Robert et G. Charpak

« Détecteur de particules à électrodes parallèles multiples et procédé de fabrication de ce détecteur »

EN 97 04617 du 15/04/1997, Brevetome : B 12743PV, Publi INPI N° 2 762 096

Joint ownership CEA, BIOSPACE

Exclusive rights are reserved for BIOSPACE by the two patents above in the fields of biological and medical applications, industrial radiography, control of luggage and containers, and waste type separation.

3. BD1744

Inventeurs : I. Giomataris and R. De Oliveira

« Method for fabricating an amplification gap of an avalanche particle detector »

Joint ownership CEA-CERN

4. BD13024

Inventeurs : I. Giomataris and R. De Oliveira

« Detector readout interface for an avalanche particle detector »

Joint ownership CEA-CERN

5. BD13560

Inventeurs : S. Cazaux and S. Aune

« Détecteur courbe de particule gazeux »

Ownership CEA