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Declaration under Rule 4.17:

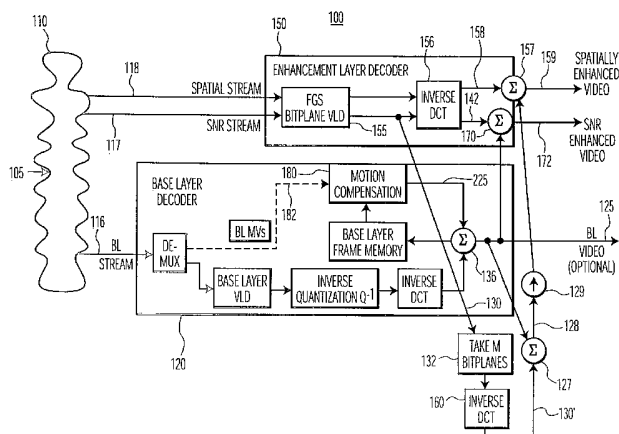
— as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for the following designation CN

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[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR DECODING SPATIALLY SCALED FINE GRANULAR ENCODED VIDEO SIGNALS



(57) Abstract: A method and system for producing decoding the transmission of high-resolution images transmitted as a low resolution spatially scalable FGS encoded base layer and at least one enhancement layer is presented. The low resolution received base layer is representative of a downscaled image of the original image. In this manner, a minimum resolution base layer is transmitted and higher resolutions may be obtained and utilized depending on the available bandwidth and the receiving system resolution capability. In one aspect of the invention, the base layer is decoded and a quality enhancement is next applied to the base layer. The combined base layer and quality layer video frames are then upscaled and the upscaled image is combined with a decoded spatial enhancement layer information. The spatial enhancement layer information fills in resolution lacking in the upscaled base layer/quality layer image. Thus, a high resolution image is formed. In another aspect of the invention, a temporal layer, containing information regarding image motion, is further applied to the upscaled base layer image to produce a spatially enhanced/temporally enhanced high resolution image.



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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

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PCT/IB 02/04740A. CLASSIFICATION OF SUBJECT MATTER
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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 H04N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 01 39503 A (KONINKL PHILIPS ELECTRONICS NV) 31 May 2001 (2001-05-31) cited in the application abstract page 13, line 4 - line 8; figure 10 ---	1-9
A	US 6 269 192 B1 (LEE HUNG-JU ET AL) 31 July 2001 (2001-07-31) column 2, line 50 -column 3, line 14 column 9, line 34 - line 45; figure 11 --- -/--	1-9

 Further documents are listed in the continuation of box C. Patent family members are listed in annex.

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	RADHA H M ET AL: "The MPEG-4 fine-grained scalable video coding method for multimedia streaming over IP" IEEE TRANSACTIONS ON MULTIMEDIA, IEEE SERVICE CENTER, PISCATAWAY, NJ, US, vol. 3, no. 1, March 2001 (2001-03), pages 53-68, XP002191171 ISSN: 1520-9210 paragraph 'IV. Hybrid Temporal-SNR Scalability with an all FGS Structure! -----	1-9
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Information on patent family members

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