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201210450379.7 12 November 2012 (12.11.2012) CN(71) Applicant: **TENCENT TECHNOLOGY (SHENZHEN) COMPANY LIMITED** [CN/CN]; Room 403, East Block 2, SEG Park, Zhenxing Road, Futian District, Shenzhen, Guangdong 518044 (CN).(72) Inventors: **YU, Chencheng**; Room 403, East Block 2, SEG Park, Zhenxing Road, Futian District, Shenzhen, Guangdong 518044 (CN). **MAO, Xunan**; Room 403, East Block 2, SEG Park, Zhenxing Road, Futian District, Shenzhen, Guangdong 518044 (CN). **CHEN, Jingchang**; Room 403, East Block 2, SEG Park, Zhenxing Road, Futian District, Shenzhen, Guangdong 518044 (CN). **LV, Jing**; Room 403, East Block 2, SEG Park, Zhenxing Road, Futian District, Shenzhen, Guangdong 518044 (CN). **WANG, Ronggang**; Room 403, East Block 2, SEG Park, Zhenxing Road, Futian District, Shenzhen, Guangdong 518044 (CN).tian District, Shenzhen, Guangdong 518044 (CN). **XIN, Bocheng**; Room 403, East Block 2, SEG Park, Zhenxing Road, Futian District, Shenzhen, Guangdong 518044 (CN). **GAO, Wen**; Room 403, East Block 2, SEG Park, Zhenxing Road, Futian District, Shenzhen, Guangdong 518044 (CN).(74) Agent: **BEIJING SAN GAO YONG XIN INTELLECTUAL PROPERTY AGENCY CO., LTD.**; A-1-102, He Jing Yuan, Ji Men Li, Xueyuan Road, Haidian District, Beijing 100088 (CN).

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(54) Title: A HYBRID-RESOLUTION ENCODING AND DECODING METHOD AND A VIDEO APPARATUS USING THE SAME

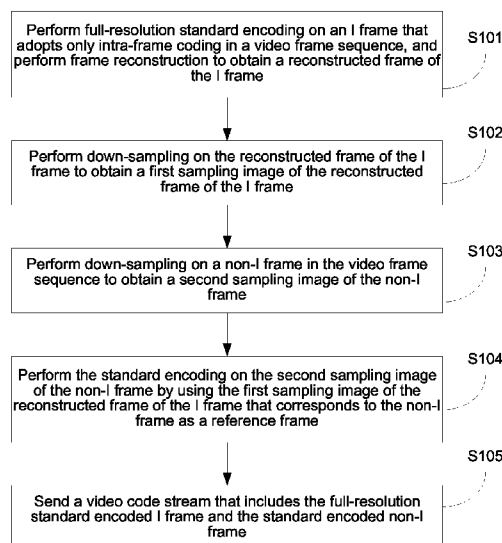


FIG. 1

(57) Abstract: The present invention provides a hybrid-resolution encoding and decoding method. The method includes performing full-resolution standard coding on an I frame that adopts only intra-frame coding in a video frame sequence, and performing frame reconstruction to obtain a reconstructed frame of the I frame; performing down-sampling on the reconstructed frame of the I frame to obtain a first sampling image of the reconstructed frame of the I frame; performing down-sampling on a non-I frame in the video frame sequence to obtain a second sampling image of the non-I frame; performing standard coding on the second sampling image of the non-I frame by using the first sampling image of the reconstructed frame of the I frame that corresponds to the non-I frame as a reference frame; and sending a video code stream that includes the full-resolution standard coded I frame and the standard coded non-I frame.



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