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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* ZHUANGFEI WU and THOMAS RUSERT

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Appeal 2017-010331  
Application 14/238,501  
Technology Center 2400

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Before JEAN R. HOMERE, ERIC B. CHEN, and NABEEL U. KHAN,  
*Administrative Patent Judges.*

CHEN, *Administrative Patent Judge.*

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134(a) from the final rejection of claims 39–75. (Claims App’x.) Claims 1–38 have been cancelled. (*Id.*) We have jurisdiction under 35 U.S.C. § 6(b). We reverse.

### STATEMENT OF THE CASE

Appellant’s invention relates to motion vector prediction and decoding for multi-view video content from multiple camera views. (Abstract.)

Claim 39 is exemplary, with disputed limitations in italics:

39. A method of motion vector prediction for multi-view video coding of video content from multiple camera views, said method comprising:

*determining a motion vector type for a motion vector*, from multiple predefined motion vector types, wherein said motion vector is estimated for a current pixel block in a current frame of a current camera view of said multiple camera views and said motion vector identifies a reference pixel area in a reference frame, wherein said motion vector type is determined based on at least one of i) said current camera view and a camera view of said reference frame among said multiple camera views, and ii) a point in time of said current frame and a point in time of said reference frame;

*identifying at least one candidate motion vector predictor of said determined motion vector type*; and

determining a motion vector predictor for said motion vector from only among said at least one candidate motion vector predictor of said determined motion vector type.

Claims 39–44, 48–54, 58–62, 66–71, and 75 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Lin (US 20140078254 A1, published Mar. 20, 2014).

Claims 45–47, 55–57, 63–65, and 72–74 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Lin and Li (Doug Li et al., *Enhanced Block Prediction in Stereoscopic Video Coding*, 2011 IEEE 1–4 (2011)).

*§ 102 Rejection—Lin*

We are persuaded by Appellant’s arguments (App. Br. 17; *see also* Reply Br. 4) that Lin does not describe the limitations “determining a motion vector type for a motion vector” and “identifying at least one candidate motion vector predictor of said determined motion vector type,” as recited in independent claim 39.

The Examiner found that the motion vector or motion vector predictor (MV/MVP) of Lin, for a block of a current picture in three-dimensional video coding, corresponds to the limitations “determining a motion vector type for a motion vector” and “identifying at least one candidate motion vector predictor of said determined motion vector type.” (Final Act. 9–10.) In particular, the Examiner found that “[t]he selection from different types of candidate motion vector predictors in Lin, such as temporal or spatial motion vector predictors, is deemed to include ‘determining’ the type as being temporal and spatial.” (*Id.* at 2.) We do not agree with the Examiner’s findings.

Lin relates to “deriving MV/MVP (motion vector or motion vector predictor) . . . associated Skip mode, Merge mode or Inter mode for a block of a current picture in three-dimensional (3D) video coding.” (Abstract.) Lin explains the following:

A method and apparatus for deriving MV/MVP (motion vector or motion vector predictor) . . . associated Skip mode,

Merge mode or Inter mode for a block of a current picture in three-dimensional video coding using spatial prediction, temporal prediction and inter-view prediction are disclosed. Embodiments according to the present invention select the MV/MVP . . . from spatial candidates, temporal candidates and inter-view candidates.

(¶ 31.)

Although the Examiner cited Lin for the general disclosure of “deriving MV/MVP (motion vector or motion vector predictor) . . . using spatial prediction, temporal prediction and inter-view prediction” and “select[ing] the MV/MVP . . . from spatial candidates, temporal candidates and inter-view candidates,” the Examiner has provided insufficient evidence to support a finding that Lin discloses the limitations “determining a motion vector type for a motion vector” and “identifying at least one candidate motion vector predictor of said determined motion vector type.” In particular, while Lin refers generally to the concepts of a “MV/MVP (motion vector or motion vector predictor)” together and refers generally to the selection of “spatial candidates, temporal candidates and inter-view candidates” (¶ 31), Lin is silent with respect to the initial step of “determining *a motion vector type* for a motion vector” before the step of “identifying at least one candidate motion vector predictor of *said* determined *motion vector type*” (emphases added), as recited in claim 39. Thus, on this record, the Examiner has not shown that Lin discloses the limitations “determining a motion vector type for a motion vector” and “identifying at least one candidate motion vector predictor of said determined motion vector type.”

Accordingly, we are persuaded by Appellant’s arguments that:

Most particularly, while Lin identifies a set of candidate motion vector predictors for use in determining a motion vector predictor, this is done without regard to a motion vector type of the motion vector for a current pixel block. For this same reason, then, Lin necessarily fails to disclose that the determining of the motion vector predictor is from only among candidate motion vector predictors of the determined type.

(App. Br. 17 (emphases omitted); *see also* Reply Br. 4.)

Therefore, we do not agree with the Examiner that Chung describes the limitations “determining a motion vector type for a motion vector” and “identifying at least one candidate motion vector predictor of said determined motion vector type.”

Accordingly, we do not sustain the rejection of independent claim 39 under 35 U.S.C. § 102(e). Claims 40–44 depends from independent claim 39. We do not sustain the rejection of claims 40–44 under 35 U.S.C. § 102(e) for the same reasons discussed with respect to independent claim 39.

Independent claims 48, 49, 58, 67, and 68 recite limitations similar to those discussed with respect to independent claim 34. We do not sustain the rejection of claims 48, 49, 58, 67, and 68, as well as dependent claims 50–54, 59–62, 66, 69–71, and 75, for the same reasons discussed with respect to claim 39.

#### *§ 103 Rejection—Lin and Li*

Claims 45–47, 55–57, 63–65, and 72–74 depend from independent claims 39, 49, 58, and 68. Li was cited by the Examiner for teaching the additional features of claims 45–47, 55–57, 63–65, and 72–74. (Final

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Act. 18–28.) However, the Examiner’s application of Li does not cure the above noted deficiencies of Lin.

**DECISION**

The Examiner’s decision rejecting claims 39–75 under 35 U.S.C. §§ 102 and 103 is reversed.

**REVERSED**