

with the bitstream, a picture parameter set associated with the bitstream, or a supplemental enhancement information message associated with the bitstream. In some embodiments, the indication indicates whether the in-picture-prediction-enabled tile set is a temporal motion-constrained tile set. In some embodiments, the indication comprises a dependency forest or graph that indicates a set of prediction dependencies for one or more tiles that are not other non-in-picture predicted tiles to one or more tiles of the in-picture-prediction-enabled tile set. In some embodiments, the indication comprises a set of anchor positions for a set of intra block copy motion vectors of a set of dependent tiles in the in-picture-prediction-enabled tile set.

[0032] In another example embodiment, an apparatus is provided that includes at least one processor and at least one memory including computer program code for one or more programs with the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus at least to receive a bitstream comprising a coded picture, the coded picture comprising one or more tiles. The computer program code is configured to, with the at least one processor, cause the apparatus to receive an indication of an in-picture-prediction-enabled tile set. The in-picture-prediction-enabled tile set identifies one or more dependent tiles from the one or more tiles. The one or more dependent tiles are dependent on another dependent tile within a coded picture or form a logical atomic unit with another dependent tile. The computer program code is configured to, with the at least one processor, cause the apparatus to decode the bitstream according to the indication of the in-picture-prediction-enabled tile set.

[0033] In some implementations of such an apparatus, the indication of the in-picture-prediction-enabled tile set is encoded in one or more of: a sequence parameter set associated with the bitstream, a picture parameter set associated with the bitstream, or a supplemental enhancement information message associated with the bitstream. In some embodiments, the indication indicates whether the in-picture-prediction-enabled tile set is a temporal motion-constrained tile set. In some embodiments, the indication comprises a dependency forest or graph that indicates a set of prediction dependencies for one or more tiles that are not other non-in-picture predicted tiles to one or more tiles of the in-picture-prediction-enabled tile set. In some embodiments, the indication comprises a set of anchor positions for a set of intra block copy motion vectors of a set of dependent tiles in the in-picture-prediction-enabled tile set.

[0034] In another example embodiment, an apparatus is provided that includes means for receiving a bitstream comprising a coded picture, the coded picture comprising one or more tiles. The apparatus further includes means for receiving an indication of an in-picture-