

ABSTRACT

5 **METHOD AND APPARATUS FOR DETECTING OBJECT, METHOD AND APPARATUS FOR TRAINING NEURAL NETWORK, AND ELECTRONIC DEVICE**

10 An object detection method, a neural network training method, an apparatus, and
an electronic device. The object detection method comprises: obtaining, by means of
prediction, multiple fused feature graphs from images to be processed, by means of a
deep convolution neural network for target region frame detection (S110), obtaining
multiple first feature graphs from a first subnet having at least one lower sampling
15 layer, obtaining multiple second feature graphs from a second subnet having at least
one upper sampling layer, and obtaining fused graph by fusing multiple first feature
graphs and multiple second feature graphs respectively; and obtaining target region
frame data according to the multiple fused feature graphs (S120). Because the fused
feature graphs better represent semantic features on high levels and detail features on
20 low levels in images, target region frame data of big and small objects comprised in
the images can be effectively extracted according to the fused feature graphs, thereby
improving the accuracy and robustness of object detection.

[Figure 1]