Fig (1a)

Fig (1b)

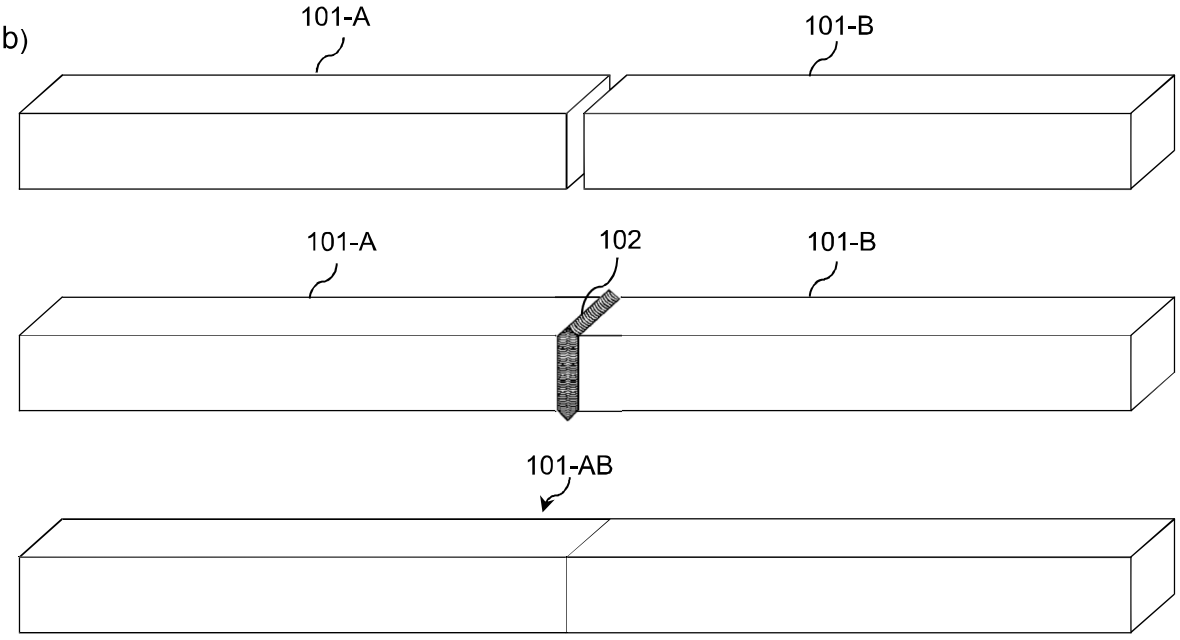


Fig (2a)

Fig (2b)

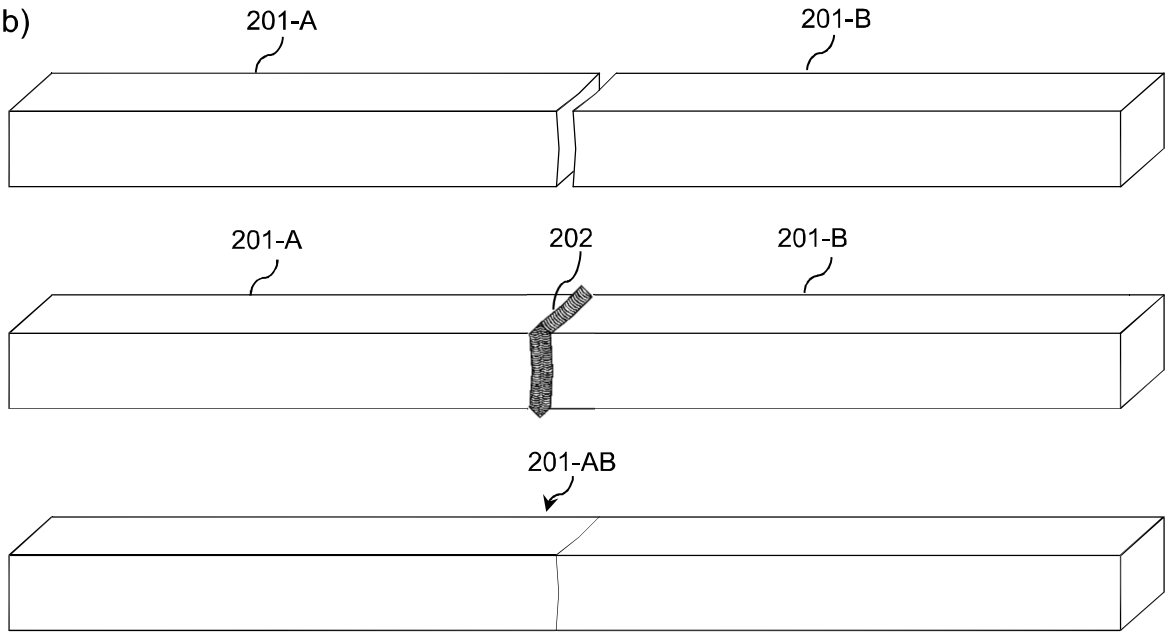


Fig (3a)

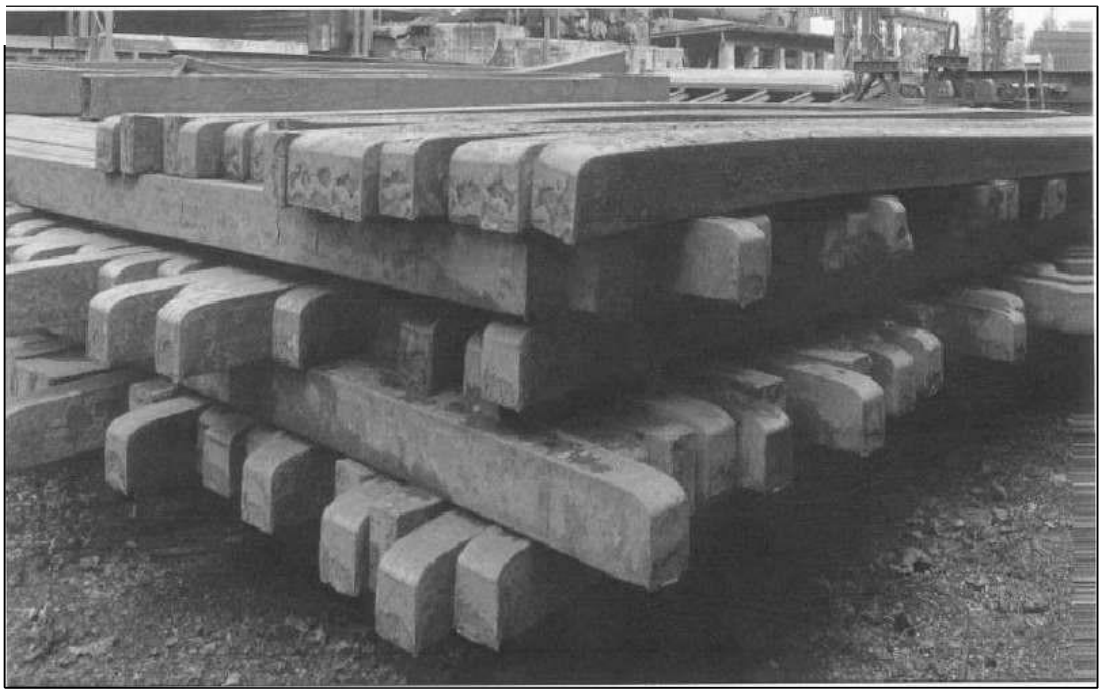


Fig (3b)

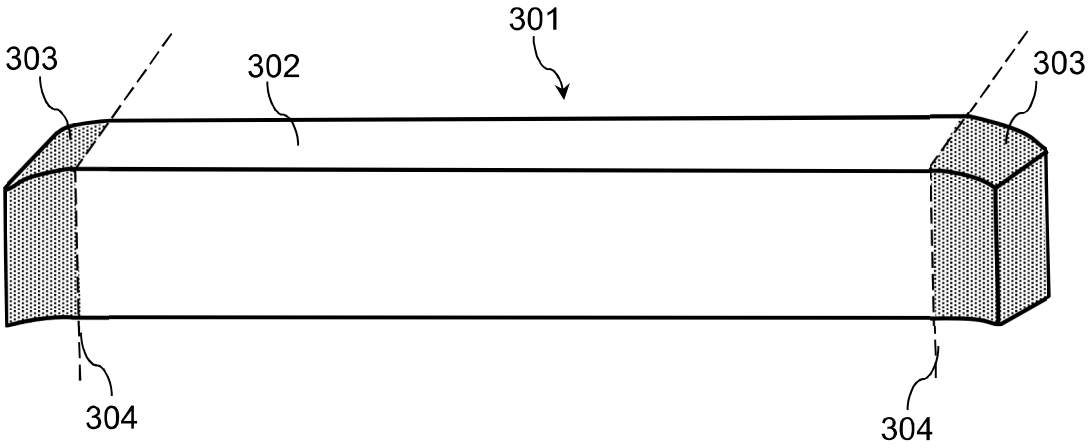


Fig (3c)

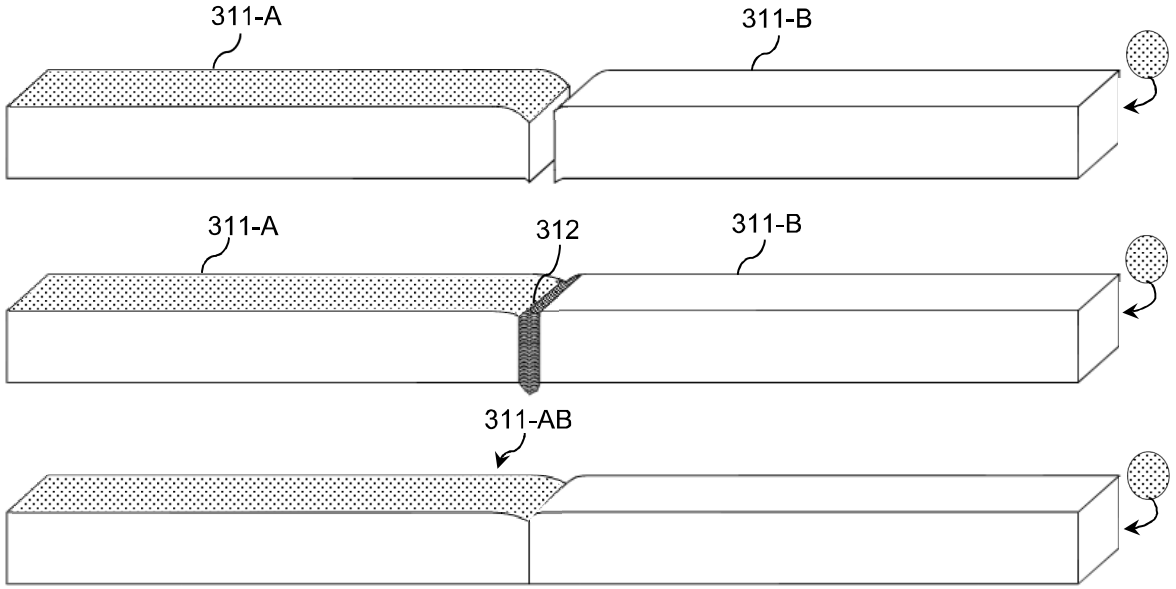
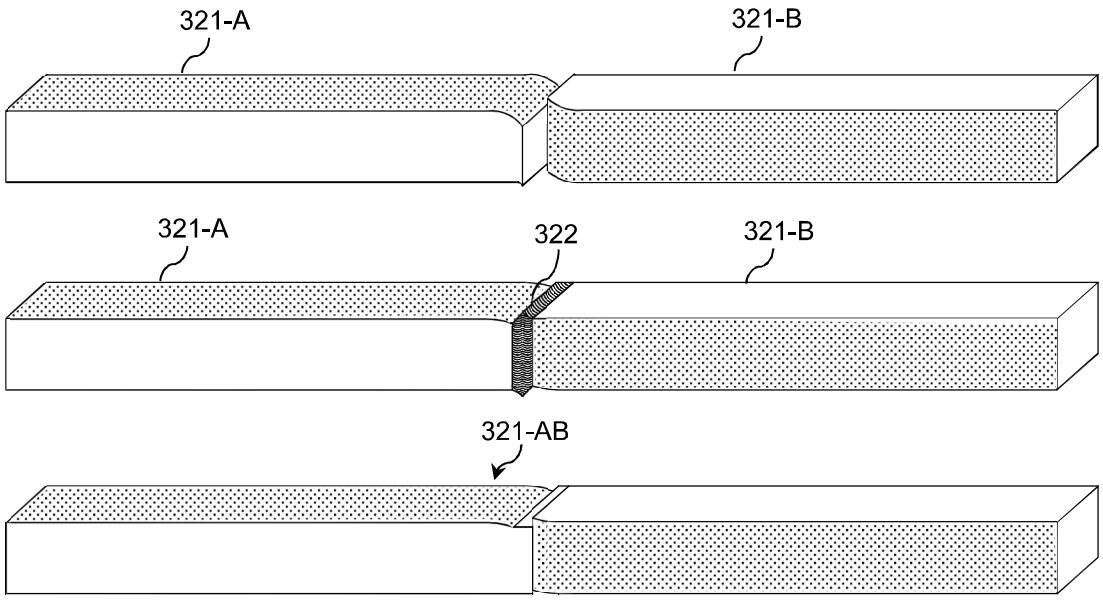


Fig (3d)



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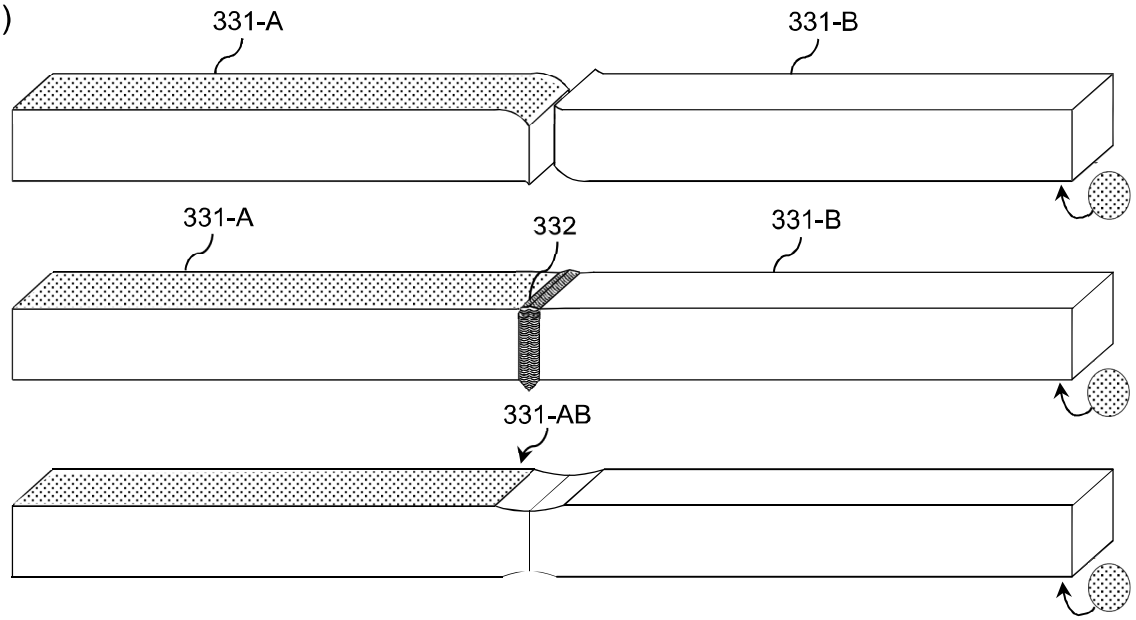
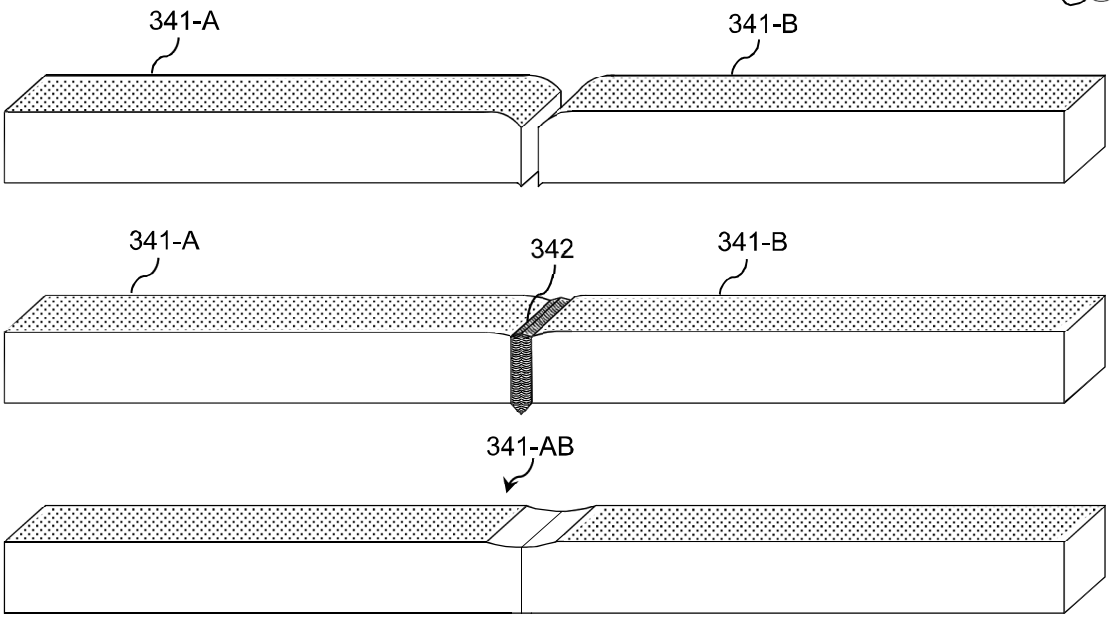


Fig (3f)



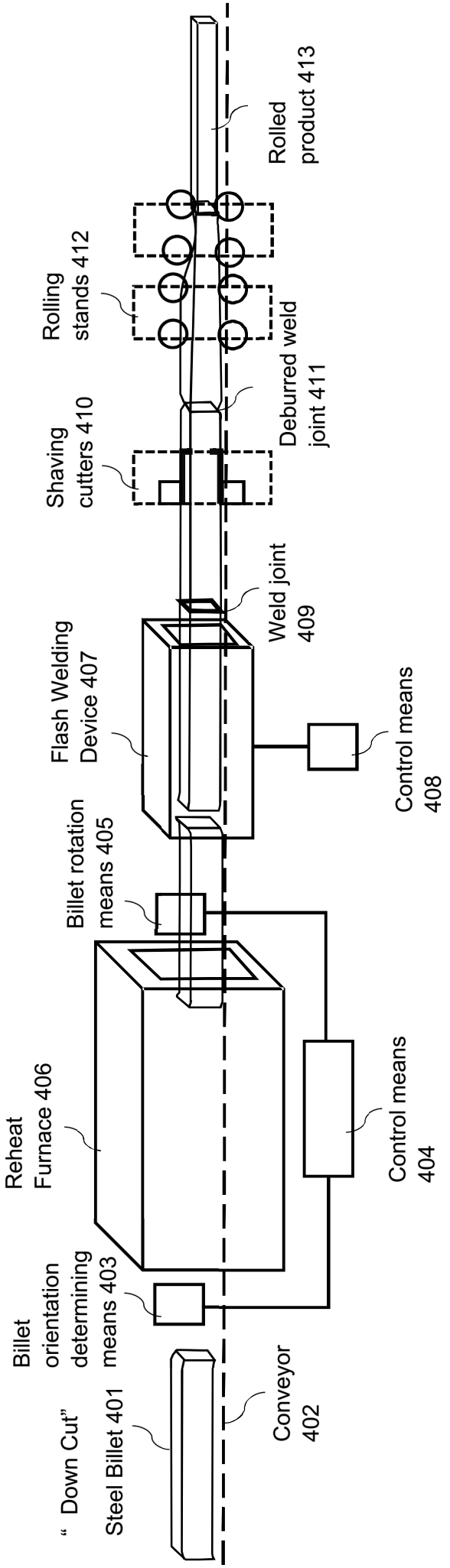
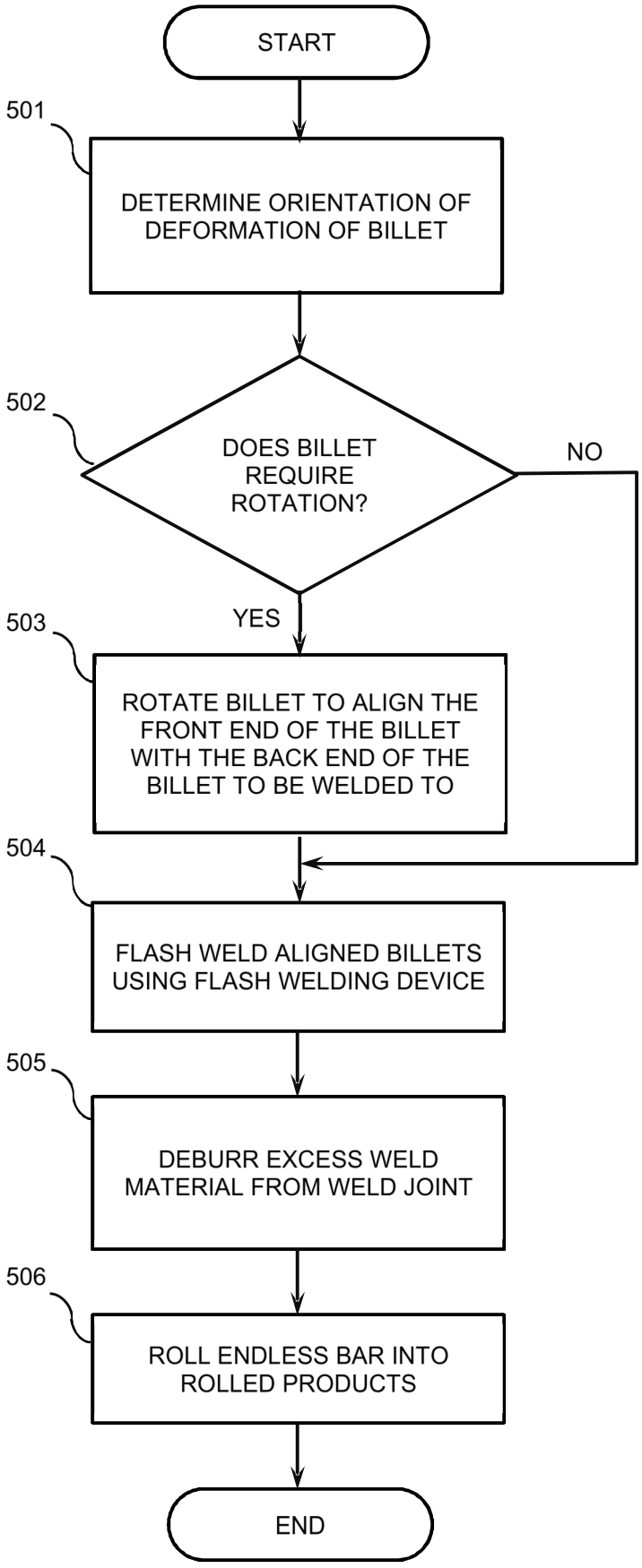

Steel Billet 401
" Down Cut"
Conveyor 402
Billet orientation determining means 403
Reheat Furnace 406
Billet rotation means 405
Flash Welding Device 407
Weld joint 409
Shaving cutters 410
Deburred weld joint 411
Rolling stands 412
Rolled product 413
Control means 404
Control means 408

Fig (4)

Fig (5)


START
501
DETERMINE ORIENTATION OF DEFORMATION OF BILLET
502
DOES BILLET REQUIRE ROTATION?
NO
YES
503
ROTATE BILLET TO ALIGN THE FRONT END OF THE BILLET WITH THE BACK END OF THE BILLET TO BE WELDED TO
504
FLASH WELD ALIGNED BILLETS USING FLASH WELDING DEVICE
505
DEBURR EXCESS WELD MATERIAL FROM WELD JOINT
506
ROLL ENDLESS BAR INTO ROLLED PRODUCTS
END