

ANNEXURE A

Firstly, some comments on the invention of Singapore Appln No. 9501809-9.

The invention is different from the existing art as the invention derives the reaction jacking force from the sheet pile retaining wall which is going to be anchored. This is achieved by having the boom (10) being attached to the forward face of the wall (40). One means of attachment is using bolts adequately welded onto the sheet pile wall surface and the jacking boom fastened onto the bolts.

The jacking of the invention works on the principle of Action and Reaction. During jacking, the hydraulic jack exerts a force (Action) on the anchoring member (30) and pushes it to penetrate into the earth behind the sheet pile wall. The sheet pile wall, through the provision of welded bolts provides the necessary Reaction for counteracting the pushing force (Action) mentioned above.

It will be seen that the method provides a new and inventive method of deriving the reaction for jacking from the sheet pile retaining wall itself.

Comments on citations follows :

1. EP 0218987

This method of anchoring involves drilling, removal of soil from the drilled hole and cement grouting.

This prior method involves no jacking, and no utilisation of reaction jacking force comes into play. Hence the method disclosed herein is totally different.

2. EP 0217366

This method of anchoring involves drilling, removal of soil from the drilled hole and cement grouting. Again, no jacking is involved. All the drilling machine are to be mounted on the drilling boom. This method relates to a method of supporting the boom by a crane at one end and the other end on a designed structure fixed onto the sheet pile wall. It is seen that this prior method does not make use of the sheet pile wall to derive any reaction jacking force, which is not necessary anyway in this prior method. Hence the prior method is totally different from the instant invention.

3. EP 0360221

Fig. 1 of the citation is the design of an anchor head and anchor block. This relates to a method of transferring ground anchor force to the retaining wall. Anchor head and anchor block designs are common. Hence the subject matter in this citation does not anticipate the instant invention or renders the instant invention obvious as the citation discloses a totally different subject matter.

4. US 4297055 & 5. US 4400114

The reaction jacking force in these citations come from the hydraulic jack thrusting on the earth directly opposite the face of which anchors, services are to be installed.

Unlike the instant invention, the reacting jacking force of the prior art is NOT derived from the sheet pile to be anchored itself.

6. WO 93/09305

Again, any jacking is from the excavated face opposite the face of which any installation is going to take place. It is therefore different.

In view of the above comments and the revised claims enclosed herein, it is respectfully urged that the Examiner reconsider his/her objections and allow the application to proceed favourably.