

TRANSLOCATIVE & FULLY-IMMERSIVE VIRTUAL REALITY DISMOUNTED PERSONNEL TRAINING SYSTEMS PATENT APPLICATION NO. 2020902261

### PRODUCT

#### Translocative Virtual Reality (TrVR) Dismounted Close Combat Training System

- High fidelity, infinite scale simulations using omnidirectional treadmills
- Full body motion capture (including fingers & eyes) and haptic feedback
- HMD panoramic visuals and surround sound
- Imitation ERS weaponry
- Optical Tracking System
- Temperature simulation
- Biometric capture
- Data capture for analytics and after action review
- Non-intrusive worn and body mounted HCIs

### **RELEVANT TO**

- Future Ready Training System
- Home Station Training (HST)
- Dismounted Synthetic Training Capability
- Land 400 Land 159 Land 125
- LS Core 2.0 JP 9711

# CAPABILITIES

- Movement through environments of any scale
- Virtual interaction with other TrVR users and interoperated external simulation assets
- Realistic haptic, visual, and audial interactions
- In-environment individual or collective training between teams and units
- Simulates congested and complex urban and littoral environments
- Future integration with end user architecture
- On demand training at the point of need
- Networkable / Modular / Scalable

## DISCRIMINATORS

- New capability for training
- Individualised freedom of movement for users to operate on any scale no size limitations
- Scenarios flow seamlessly with zero interruptions
- Full body virtual interaction and feedback (including fingers)
- Simulates effects of dangerous environments through haptics e.g. direct / indirect fire
- Non intrusive integration of hardware allows use of full SCE and associated load bearing
- Single or multi domain interoperability





TRANSLOCATIVE & FULLY-IMMERSIVE VIRTUAL REALITY DISMOUNTED PERSONNEL TRAINING SYSTEMS PATENT APPLICATION NO. 2020902261

### PRODUCT

#### Fully Immersive Virtual Reality (FIVR) Dismounted Close Combat Training System

- High fidelity, fixed scale simulations with physical mockup assets e.g. IFVs, doors and walls
- Fixed overhead optical tracking installation
- Full body motion capture (including fingers & eyes) and haptic feedback
- HMD panoramic visuals and surround sound
- Temperature simulation
- Imitation ERS weaponry
- Biometric capture
- Data capture for analytics and after action review
- Non-intrusive worn and body mounted HCIs

### **RELEVANT TO**

- Future Ready Training System
- Home Station Training (HST)
- Dismounted Synthetic Training Capability
- Land 400 Land 159 Land 125
- LS Core 2.0 JP 9711

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# CAPABILITIES

- Interaction with physical environmental assets
- e.g. IFVs, doors and windows
- Physical interaction with other participants
- Realistic mixed physical / haptic interactions
- Simulates congested and complex urban and littoral environments
- In-environment individual or collective training
- Future integration with end user architecture
- Intra and inter-simulator interoperability
- Networkable / Modular / Interoperable

## DISCRIMINATORS

- New capability for training
- Full body mixed virtual and physical interaction and feedback (including fingers)
- Simulates effects of dangerous environments through haptic feedback e.g. direct/indirect fire
- Non intrusive integration of hardware allows use of full SCE and associated load bearing.
- Physical and virtual interaction with interoperated external simulation assets

