ENGG7811
Joshua Maloney
s40107464

1.

The purpose of the thesis is to zoom in on regional data. By "regional data" I mean something that has a geographic location or is spread out in space. Zooming in on regional data explores the way someone interacts with a type of data set. The project work is fundamentally about building a virtual world that represents the data space, and developing a user experience through its visualisation and control interface. As a working example we will focus on Australian renewable energy and daily solar power supply in each postcode region.

2.

The primary IP's of this project are going to be software products.

The main product will be the visualisation engine that the user interacts with.

There may be a need for supporting products, there is a need to provide data which is available, but needs to be converted into a regional format.

These parts of the IP will be considered to be under copyright because it is a body of work and not an idea to be patented or a design element which could fall under trademark. The name, logo or design of the product could be trademarked.

3.

I

a.
i. SYSTEM AND METHOD FOR VISUALISING A SCENARIO
ii. 20130219316
iii. Taper Bruce
iv. Taper Bruce
v. 22.08.2013

b.

The patent describes a method of visualising regional data and in particular providing a user interface to observe resource data such as usage and supply rate. The patent is in particular focused on measuring data on greenhouse gas emissions. The patent describes details of displaying a map and data, displaying windows with user interface elements as well as navigation features describing how a user would interact with the software using a mouse or keyboard.

c.

This is relevant to my project because it is doing three main things the same: displaying a map, visualising regional data, and focusing on user interaction. There is also the similar feature that the software products will both consume data in real time and display atmospheric information.

d.

This patent is not a threat to the IP of my project because the patent is very general, as described in the patent that the invention could be made by those skilled in the art. The specific claims include a map but not 3D visualisation that my project is using. There is no claim of data being connected by a web API or claim of a GUI that is tied to objects in the 3D scene. While there are some major similarities between my project and this invention, there is no similarity between the design in the patent claim.

II

a..
Geo-located activity visualisation, editing and sharing
2014295814

Ayvri Holdings Pty Ltd
28.01.2016

b.

This patent describes the invention of a type of 3rd-person camera that can be used to visualise 3D space and navigate through its features. The reason for the invention is to improve the user experience in virtual worlds by making a more natural camera movement, and avoiding any erratic movements. The patent describes the camera motion and how camera tracking may be used to follow and track an object or a prerecorded path. The patant goes on to describe 3D rendering features such as terrain tiling and 3D level-of-detail. There is also a description in the patent of objects being geo-located and receiving data to be visualised in real time.

c.

The patent is relevant for my project because a navigation and camera system is an integral feature of my project. Some of the description of this patent will apply to my software, since I will be using a 3D camera to display data and geolocated items. It will be important in my project not to infringe on the patent of an existing invention's IP.

d.

I do not think this patent would prevent the IP in my project from being commercialised because the techniques are not the same. My project does not use the ray sampling method that is described in the patent. My project is more focused on user interaction and free navigation, or automatic positioning, and does not make a lot of use of pre-recorded paths. Although there are some similarities in the way the camera is handled, these are not part of the specific claims in the patent.

III

a.
Determining and visualising light and visibility in an area
2017323867

The Institute of Digital Design Australia Pty Ltd
15.03.2018

b.

This patent describes a method of generating data of light patterns in 3D buildings. The patent covers creating data from a model and visualising the data.

The detail of the patent covers line-of-sight problems and how this will be used to create a map of surface objects and obstructions. The model can take into account clear objects and transparant parts of the building.

c.

There is a connection here between this patent and my project, because one of the aspects of data that I consider in my project is the area of a building that is exposed to sky lighting for the purpose of computing the potential PV output.

d.

This patent is not a problem for commercialising my IP. Although the data is interesting, we would not need to make use of it's methods because we can access similar data from other sources already. If we wanted to use this type of data we could use the already available source and would not need to include this capability within our own IP. Therefore we are not in danger of infringing on this patent.